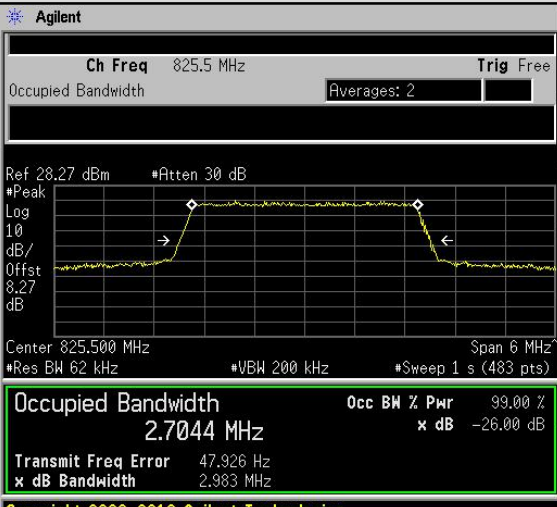
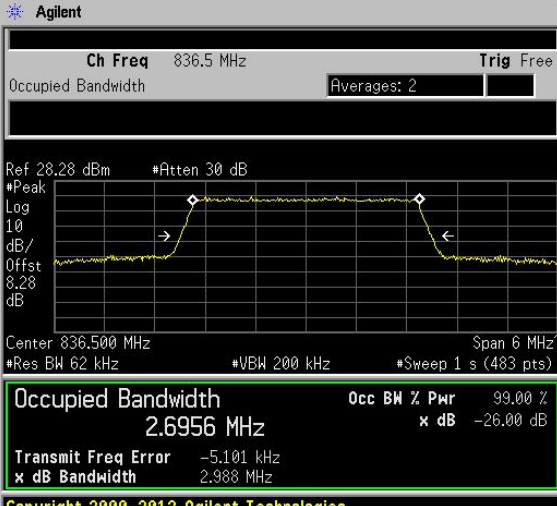
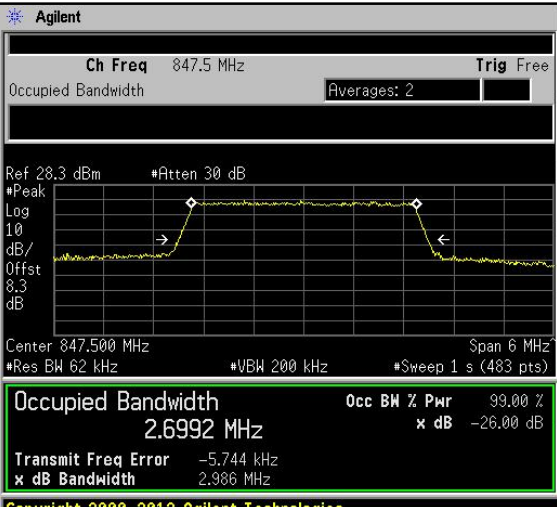




LTE Band 5 (Channel Bandwidth: 1.4 MHz) _ 16QAM	
824.7 MHz	Agilent Ch Freq 824.7 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.26 dBm #Atten 30 dB #Peak Log 10 dB/ Offst 8.26 dB Center 824.700 MHz #Res BW 27 kHz #VBW 100 kHz Span 2.8 MHz #Sweep 1 s (518 pts) Occupied Bandwidth 1.0936 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -4.090 kHz x dB Bandwidth 1.298 MHz Copyright 2000-2012 Agilent Technologies Freq/Channel Center Freq 824.700000 MHz Start Freq 823.300000 MHz Stop Freq 826.100000 MHz CF Step 280.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
836.5 MHz	Agilent Ch Freq 836.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.28 dBm #Atten 30 dB #Peak Log 10 dB/ Offst 8.28 dB Center 836.500 MHz #Res BW 27 kHz #VBW 100 kHz Span 2.8 MHz #Sweep 1 s (518 pts) Occupied Bandwidth 1.0853 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -823.934 Hz x dB Bandwidth 1.287 MHz Copyright 2000-2012 Agilent Technologies Freq/Channel Center Freq 836.500000 MHz Start Freq 835.100000 MHz Stop Freq 837.900000 MHz CF Step 280.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
848.3 MHz	Agilent Ch Freq 848.3 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.3 dBm #Atten 30 dB #Peak Log 10 dB/ Offst 8.3 dB Center 848.300 MHz #Res BW 27 kHz #VBW 100 kHz Span 2.8 MHz #Sweep 1 s (518 pts) Occupied Bandwidth 1.0865 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -1.317 kHz x dB Bandwidth 1.288 MHz Copyright 2000-2012 Agilent Technologies Freq/Channel Center Freq 848.300000 MHz Start Freq 846.900000 MHz Stop Freq 849.700000 MHz CF Step 280.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

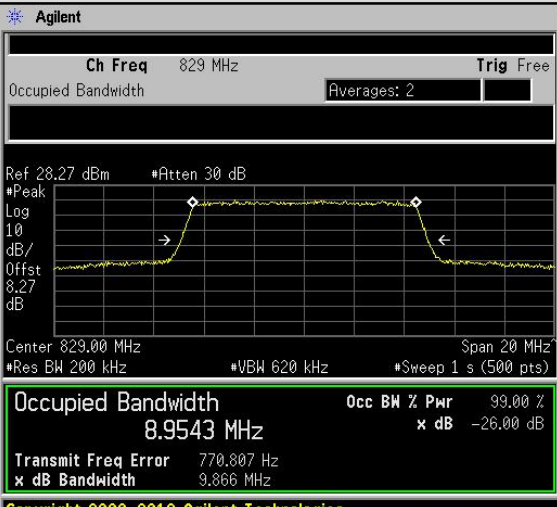
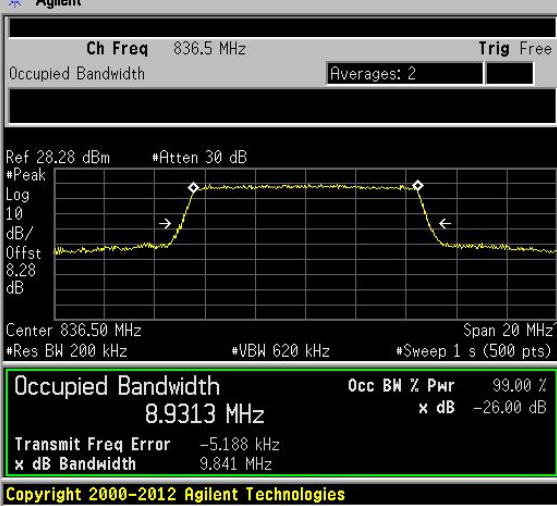
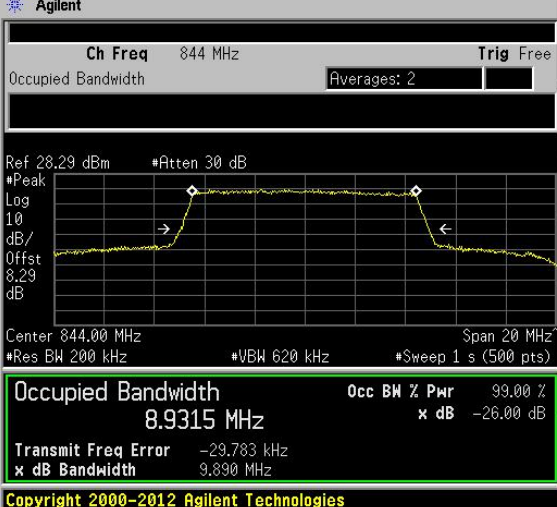


LTE Band 5 (Channel Bandwidth: 3 MHz) _ 16QAM		
825.5 MHz	 Agilent Ch Freq 825.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.27 dBm #Atten 30 dB #Peak Log 10 dB/ Offst 8.27 dB Center 825.500 MHz Span 6 MHz #Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts) Occupied Bandwidth 2.7044 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 47.926 Hz x dB Bandwidth 2.983 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 825.500000 MHz Start Freq 822.500000 MHz Stop Freq 828.500000 MHz CF Step 600.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
836.5 MHz	 Agilent Ch Freq 836.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.28 dBm #Atten 30 dB #Peak Log 10 dB/ Offst 8.28 dB Center 836.500 MHz Span 6 MHz #Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts) Occupied Bandwidth 2.6956 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -5.101 kHz x dB Bandwidth 2.988 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 836.500000 MHz Start Freq 833.500000 MHz Stop Freq 839.500000 MHz CF Step 600.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
847.5 MHz	 Agilent Ch Freq 847.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.3 dBm #Atten 30 dB #Peak Log 10 dB/ Offst 8.3 dB Center 847.500 MHz Span 6 MHz #Res BW 62 kHz #VBW 200 kHz #Sweep 1 s (483 pts) Occupied Bandwidth 2.6992 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -5.744 kHz x dB Bandwidth 2.986 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 847.500000 MHz Start Freq 844.500000 MHz Stop Freq 850.500000 MHz CF Step 600.000000 kHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 5 (Channel Bandwidth: 5 MHz) _ 16QAM		
826.5 MHz	Agilent Ch Freq 826.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.27 dBm #Atten 30 dB #Peak Log 10 dB/Offst 8.27 dB Center 826.500 MHz Span 10 MHz #Res BW 100 kHz #VBW 300 kHz #Sweep 1 s (500 pts) Occupied Bandwidth 4.4938 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -2.837 kHz x dB Bandwidth 4.994 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 826.500000 MHz Start Freq 821.500000 MHz Stop Freq 831.500000 MHz CF Step 1.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
836.5 MHz	Agilent Ch Freq 836.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.28 dBm #Atten 30 dB #Peak Log 10 dB/Offst 8.28 dB Center 836.500 MHz Span 10 MHz #Res BW 100 kHz #VBW 300 kHz #Sweep 1 s (500 pts) Occupied Bandwidth 4.5048 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -3.488 kHz x dB Bandwidth 4.993 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 836.500000 MHz Start Freq 831.500000 MHz Stop Freq 841.500000 MHz CF Step 1.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
846.5 MHz	Agilent Ch Freq 846.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.3 dBm #Atten 30 dB #Peak Log 10 dB/Offst 8.3 dB Center 846.500 MHz Span 10 MHz #Res BW 100 kHz #VBW 300 kHz #Sweep 1 s (500 pts) Occupied Bandwidth 4.5042 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -5.248 kHz x dB Bandwidth 5.049 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 846.500000 MHz Start Freq 841.500000 MHz Stop Freq 851.500000 MHz CF Step 1.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

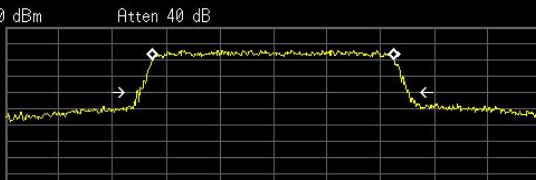
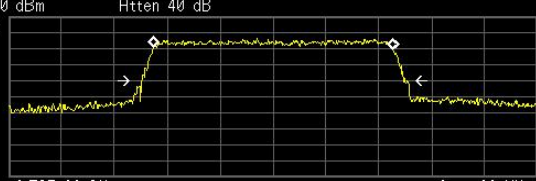
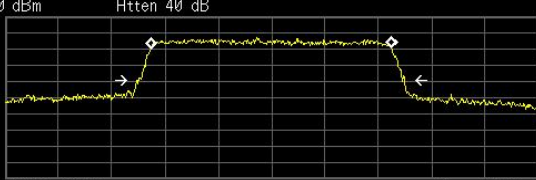


LTE Band 5 (Channel Bandwidth: 10 MHz) _ 16QAM		
829.0 MHz	 Agilent Ch Freq 829 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.27 dBm *Atten 30 dB *Peak Log 10 dB/ Offst 8.27 dB Center 829.00 MHz Span 20 MHz *Res BW 200 kHz *VBW 620 kHz *Sweep 1 s (500 pts) Occupied Bandwidth 8.9543 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 770.807 Hz x dB Bandwidth 9.866 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 829.000000 MHz Start Freq 819.000000 MHz Stop Freq 839.000000 MHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
836.5 MHz	 Agilent Ch Freq 836.5 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.28 dBm *Atten 30 dB *Peak Log 10 dB/ Offst 8.28 dB Center 836.50 MHz Span 20 MHz *Res BW 200 kHz *VBW 620 kHz *Sweep 1 s (500 pts) Occupied Bandwidth 8.9313 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -5.188 kHz x dB Bandwidth 9.841 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 836.500000 MHz Start Freq 826.500000 MHz Stop Freq 846.500000 MHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
844.0 MHz	 Agilent Ch Freq 844 MHz Trig Free Occupied Bandwidth Averages: 2 Ref 28.29 dBm *Atten 30 dB *Peak Log 10 dB/ Offst 8.29 dB Center 844.00 MHz Span 20 MHz *Res BW 200 kHz *VBW 620 kHz *Sweep 1 s (500 pts) Occupied Bandwidth 8.9315 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -29.783 kHz x dB Bandwidth 9.890 MHz Copyright 2000-2012 Agilent Technologies	Freq/Channel Center Freq 844.000000 MHz Start Freq 834.000000 MHz Stop Freq 854.000000 MHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 7 (Channel Bandwidth: 5 MHz) _ QPSK	
2502.5 MHz	Agilent Ch Freq 2.5025 GHz Trig Free Occupied Bandwidth Center 2.502500000 GHz Ref 30 dBm Atten 40 dB Peak Log 10 dB/ Center 2.502 500 GHz Span 10 MHz Res BW 100 kHz VBW 300 kHz Sweep 1 ms (601 pts) Occupied Bandwidth 4.5092 MHz Occ BW % Pwr 99.00 % Transmit Freq Error 4.152 kHz dB Bandwidth 4.975 MHz File Operation Status, C:\SCREN064.GIF file saved Freq/Channel Center Freq 2.50250000 GHz Start Freq 2.49750000 GHz Stop Freq 2.50750000 GHz CF Step 1.00000000 MHz Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB Peak Log 10 dB/ Center 2.535 000 GHz Span 10 MHz Res BW 100 kHz VBW 300 kHz Sweep 1 ms (601 pts) Occupied Bandwidth 4.5243 MHz Occ BW % Pwr 99.00 % Transmit Freq Error 5.225 kHz dB Bandwidth 4.947 MHz File Operation Status, C:\SCREN060.GIF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.53000000 GHz Stop Freq 2.54000000 GHz CF Step 1.00000000 MHz Freq Offset 0.00000000 Hz Signal Track On Off
2567.5 MHz	Agilent Ch Freq 2.5675 GHz Trig Free Occupied Bandwidth Center 2.567500000 GHz Ref 30 dBm Atten 40 dB Peak Log 10 dB/ Center 2.567 500 GHz Span 10 MHz Res BW 100 kHz VBW 300 kHz Sweep 1 ms (601 pts) Occupied Bandwidth 4.5224 MHz Occ BW % Pwr 99.00 % Transmit Freq Error -5.999 kHz dB Bandwidth 5.025 MHz File Operation Status, C:\SCREN061.GIF file saved Freq/Channel Center Freq 2.56750000 GHz Start Freq 2.56250000 GHz Stop Freq 2.57250000 GHz CF Step 1.00000000 MHz Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 7 (Channel Bandwidth: 10 MHz) _ QPSK	
2505.0 MHz	Agilent Ch Freq 2.505 GHz Trig Free Occupied Bandwidth Center 2.505000000 GHz Ref 30 dBm Atten 40 dB *Peak Log 10 dB/  Center 2.505 00 GHz Span 20 MHz *Res BW 300 kHz *VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 9.0060 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 9.059 kHz x dB Bandwidth 10.163 MHz File Operation Status, C:\SCREN070.GIF file saved Freq/Channel Center Freq 2.50500000 GHz Start Freq 2.49500000 GHz Stop Freq 2.51500000 GHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB *Peak Log 10 dB/  Center 2.535 00 GHz Span 20 MHz *Res BW 300 kHz *VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 9.0364 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 19.035 kHz x dB Bandwidth 9.943 MHz File Operation Status, C:\SCREN066.GIF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.52500000 GHz Stop Freq 2.54500000 GHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2565.0 MHz	Agilent Ch Freq 2.565 GHz Trig Free Occupied Bandwidth Center 2.565000000 GHz Ref 30 dBm Atten 40 dB *Peak Log 10 dB/  Center 2.565 00 GHz Span 20 MHz *Res BW 300 kHz *VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 9.0045 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -6.854 kHz x dB Bandwidth 9.971 MHz File Operation Status, C:\SCREN067.GIF file saved Freq/Channel Center Freq 2.56500000 GHz Start Freq 2.55500000 GHz Stop Freq 2.57500000 GHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 7 (Channel Bandwidth: 15 MHz) _ QPSK	
2507.5 MHz	Agilent Ch Freq 2.5075 GHz Trig Free Occupied Bandwidth Center 2.507500000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.507 50 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 13.4974 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -1.737 kHz x dB Bandwidth 14.669 MHz File Operation Status, C:\SCREN076.6IF file saved Freq/Channel Center Freq 2.50750000 GHz Start Freq 2.48750000 GHz Stop Freq 2.52750000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.535 00 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 13.5314 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 10.248 kHz x dB Bandwidth 14.485 MHz File Operation Status, C:\SCREN072.6IF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.51500000 GHz Stop Freq 2.55500000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2562.5 MHz	Agilent Ch Freq 2.5625 GHz Trig Free Occupied Bandwidth Center 2.562500000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.562 50 GHz #Res BW 300 kHz #VBW 1 MHz Span 40 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 13.5004 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -6.851 kHz x dB Bandwidth 14.737 MHz File Operation Status, C:\SCREN073.6IF file saved Freq/Channel Center Freq 2.56250000 GHz Start Freq 2.54250000 GHz Stop Freq 2.58250000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

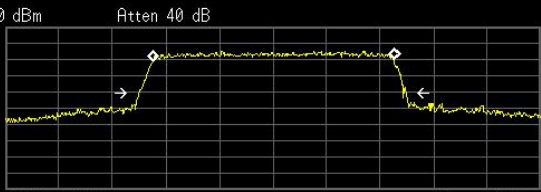
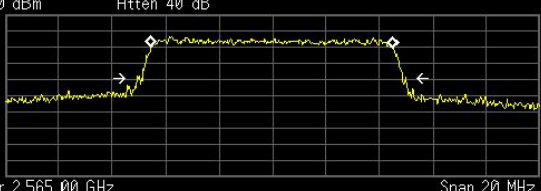


LTE Band 7 (Channel Bandwidth: 20 MHz) _ QPSK	
2510.0 MHz	Agilent Ch Freq 2.51 GHz Trig Free Occupied Bandwidth Center 2.510000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.510 00 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 17.9070 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 32.481 kHz x dB Bandwidth 19.131 MHz File Operation Status, C:\SCREN057.GIF file saved Freq/Channel Center Freq 2.51000000 GHz Start Freq 2.49000000 GHz Stop Freq 2.53000000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.535 00 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 17.8701 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 44.121 kHz x dB Bandwidth 19.302 MHz File Operation Status, C:\SCREN053.GIF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.51500000 GHz Stop Freq 2.55500000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2560.0 MHz	Agilent Ch Freq 2.56 GHz Trig Free Occupied Bandwidth Center 2.560000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.560 00 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 17.8716 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -47.468 kHz x dB Bandwidth 19.322 MHz File Operation Status, C:\SCREN056.GIF file saved Freq/Channel Center Freq 2.56000000 GHz Start Freq 2.54000000 GHz Stop Freq 2.58000000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 7 (Channel Bandwidth: 5 MHz) _ 16QAM	
2502.5 MHz	Agilent Ch Freq 2.5025 GHz Trig Free Occupied Bandwidth Center 2.502500000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.502 500 GHz Span 10 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts) Occupied Bandwidth 4.5218 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 8.446 kHz x dB Bandwidth 5.016 MHz File Operation Status, C:\SCREN063.GIF file saved Freq/Channel Center Freq 2.50250000 GHz Start Freq 2.49750000 GHz Stop Freq 2.50750000 GHz CF Step 1.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.535 000 GHz Span 10 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts) Occupied Bandwidth 4.5276 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 1.593 kHz x dB Bandwidth 5.019 MHz File Operation Status, C:\SCREN059.GIF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.53000000 GHz Stop Freq 2.54000000 GHz CF Step 1.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2567.5 MHz	Agilent Ch Freq 2.5675 GHz Trig Free Occupied Bandwidth Center 2.567500000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.567 500 GHz Span 10 MHz #Res BW 100 kHz #VBW 300 kHz Sweep 1 ms (601 pts) Occupied Bandwidth 4.5104 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -111.863 Hz x dB Bandwidth 5.003 MHz File Operation Status, C:\SCREN062.GIF file saved Freq/Channel Center Freq 2.56750000 GHz Start Freq 2.56250000 GHz Stop Freq 2.57250000 GHz CF Step 1.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 7 (Channel Bandwidth: 10 MHz) _16QAM	
2505.0 MHz	Agilent Ch Freq 2.505 GHz Trig Free Occupied Bandwidth Center 2.505000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/  Center 2.505 00 GHz Span 20 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 8.9961 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 19.823 kHz x dB Bandwidth 9.956 MHz File Operation Status, C:\SCREN069.0IF file saved Freq/Channel Center Freq 2.50500000 GHz Start Freq 2.49500000 GHz Stop Freq 2.51500000 GHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/  Center 2.535 00 GHz Span 20 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 9.0435 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 15.993 kHz x dB Bandwidth 9.995 MHz File Operation Status, C:\SCREN065.0IF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.52500000 GHz Stop Freq 2.54500000 GHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2565.0 MHz	Agilent Ch Freq 2.565 GHz Trig Free Occupied Bandwidth Center 2.565000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/  Center 2.565 00 GHz Span 20 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 9.0369 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -6.726 kHz x dB Bandwidth 10.062 MHz File Operation Status, C:\SCREN068.0IF file saved Freq/Channel Center Freq 2.56500000 GHz Start Freq 2.55500000 GHz Stop Freq 2.57500000 GHz CF Step 2.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



LTE Band 7 (Channel Bandwidth: 15 MHz) _ 16QAM	
2507.5 MHz	Agilent Ch Freq 2.5075 GHz Trig Free Occupied Bandwidth Center 2.507500000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/  Center 2.507 50 GHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Span 40 MHz Occupied Bandwidth 13.4665 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 9.890 kHz x dB Bandwidth 14.760 MHz File Operation Status, C:\SCREEN075.GIF file saved Freq/Channel Center Freq 2.50750000 GHz Start Freq 2.48750000 GHz Stop Freq 2.52750000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/  Center 2.535 00 GHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Span 40 MHz Occupied Bandwidth 13.4415 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 17.601 kHz x dB Bandwidth 14.806 MHz File Operation Status, C:\SCREEN071.GIF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.51500000 GHz Stop Freq 2.55500000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2562.5 MHz	Agilent Ch Freq 2.5625 GHz Trig Free Occupied Bandwidth Center 2.562500000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/  Center 2.562 50 GHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Span 40 MHz Occupied Bandwidth 13.5706 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -15.874 kHz x dB Bandwidth 14.914 MHz File Operation Status, C:\SCREEN074.GIF file saved Freq/Channel Center Freq 2.56250000 GHz Start Freq 2.54250000 GHz Stop Freq 2.58250000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off



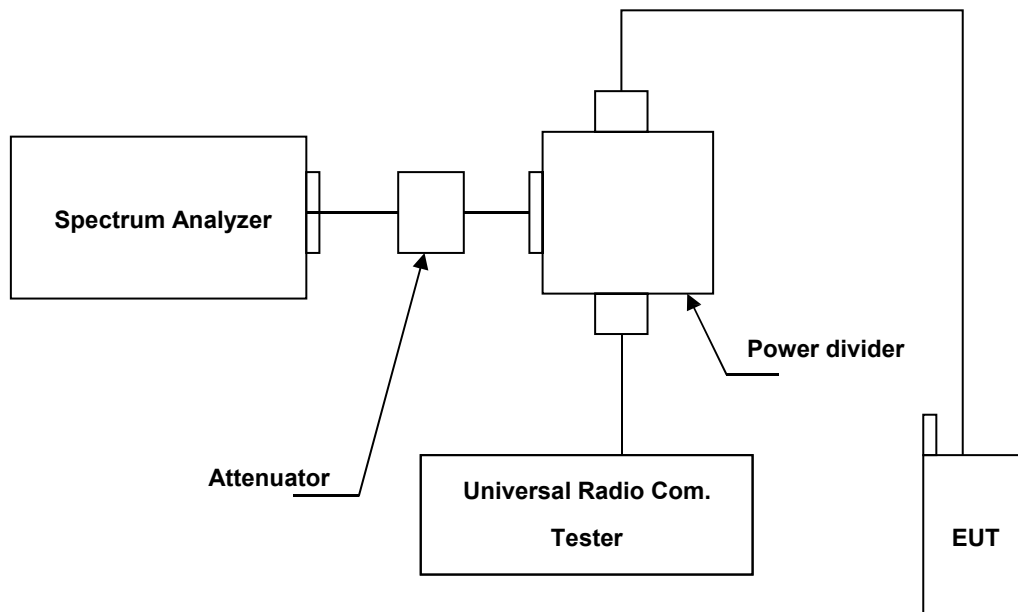
LTE Band 7 (Channel Bandwidth: 20 MHz) _ 16QAM	
2510.0 MHz	Agilent Ch Freq 2.51 GHz Trig Free Occupied Bandwidth Center 2.510000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.510 00 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 17.8639 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -9.918 kHz x dB Bandwidth 19.302 MHz File Operation Status, C:\SCREN058.0IF file saved Freq/Channel Center Freq 2.51000000 GHz Start Freq 2.49000000 GHz Stop Freq 2.53000000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2535.0 MHz	Agilent Ch Freq 2.535 GHz Trig Free Occupied Bandwidth Center 2.535000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.535 00 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 17.9526 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error 45.936 kHz x dB Bandwidth 18.990 MHz File Operation Status, C:\SCREN054.0IF file saved Freq/Channel Center Freq 2.53500000 GHz Start Freq 2.51500000 GHz Stop Freq 2.55500000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off
2560.0 MHz	Agilent Ch Freq 2.56 GHz Trig Free Occupied Bandwidth Center 2.560000000 GHz Ref 30 dBm Atten 40 dB #Peak Log 10 dB/ Center 2.560 00 GHz Span 40 MHz #Res BW 300 kHz #VBW 1 MHz Sweep 1 ms (601 pts) Occupied Bandwidth 17.9075 MHz Occ BW % Pwr 99.00 % x dB -26.00 dB Transmit Freq Error -28.909 kHz x dB Bandwidth 19.218 MHz File Operation Status, C:\SCREN055.0IF file saved Freq/Channel Center Freq 2.56000000 GHz Start Freq 2.54000000 GHz Stop Freq 2.58000000 GHz CF Step 4.00000000 MHz Auto Man Freq Offset 0.00000000 Hz Signal Track On Off

6 Peak to Average Ratio Test

6.1. Limit

In measuring transmissions in this band using an average power technique, the peak to-average ratio (PAR) of the transmission may not exceed 13 dB.

6.2. Setup





6.3. Test Procedure

The measurement is made according to FCC rules:

- a. Set resolution/measurement bandwidth signal's occupied bandwidth;
- b. Set the number of counts to a value that stabilizes the measured CCDF curve;
- c. Record the maximum PAPR level associated with a probability of 0.1%.



6.4. Test Result

LTE Band 2				
Modulation	Channel Bandwidth	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)
QPSK	1.4 MHz	1880.0	4.97	< 13
	3 MHz	1880.0	5.09	< 13
	5 MHz	1880.0	4.96	< 13
	10 MHz	1880.0	4.88	< 13
	15 MHz	1880.0	4.76	< 13
	20 MHz	1880.0	4.48	< 13
16QAM	1.4 MHz	1880.0	6.04	< 13
	3 MHz	1880.0	6.21	< 13
	5 MHz	1880.0	6.12	< 13
	10 MHz	1880.0	6.08	< 13
	15 MHz	1880.0	5.87	< 13
	20 MHz	1880.0	5.62	< 13

LTE Band 4				
Modulation	Channel Bandwidth	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)
QPSK	1.4 MHz	1732.5	4.43	< 13
	3 MHz	1732.5	4.44	< 13
	5 MHz	1732.5	4.31	< 13
	10 MHz	1732.5	4.06	< 13
	15 MHz	1732.5	3.81	< 13
	20 MHz	1732.5	3.62	< 13
16QAM	1.4 MHz	1732.5	5.57	< 13
	3 MHz	1732.5	5.54	< 13
	5 MHz	1732.5	5.48	< 13
	10 MHz	1732.5	5.05	< 13
	15 MHz	1732.5	4.83	< 13
	20 MHz	1732.5	4.69	< 13

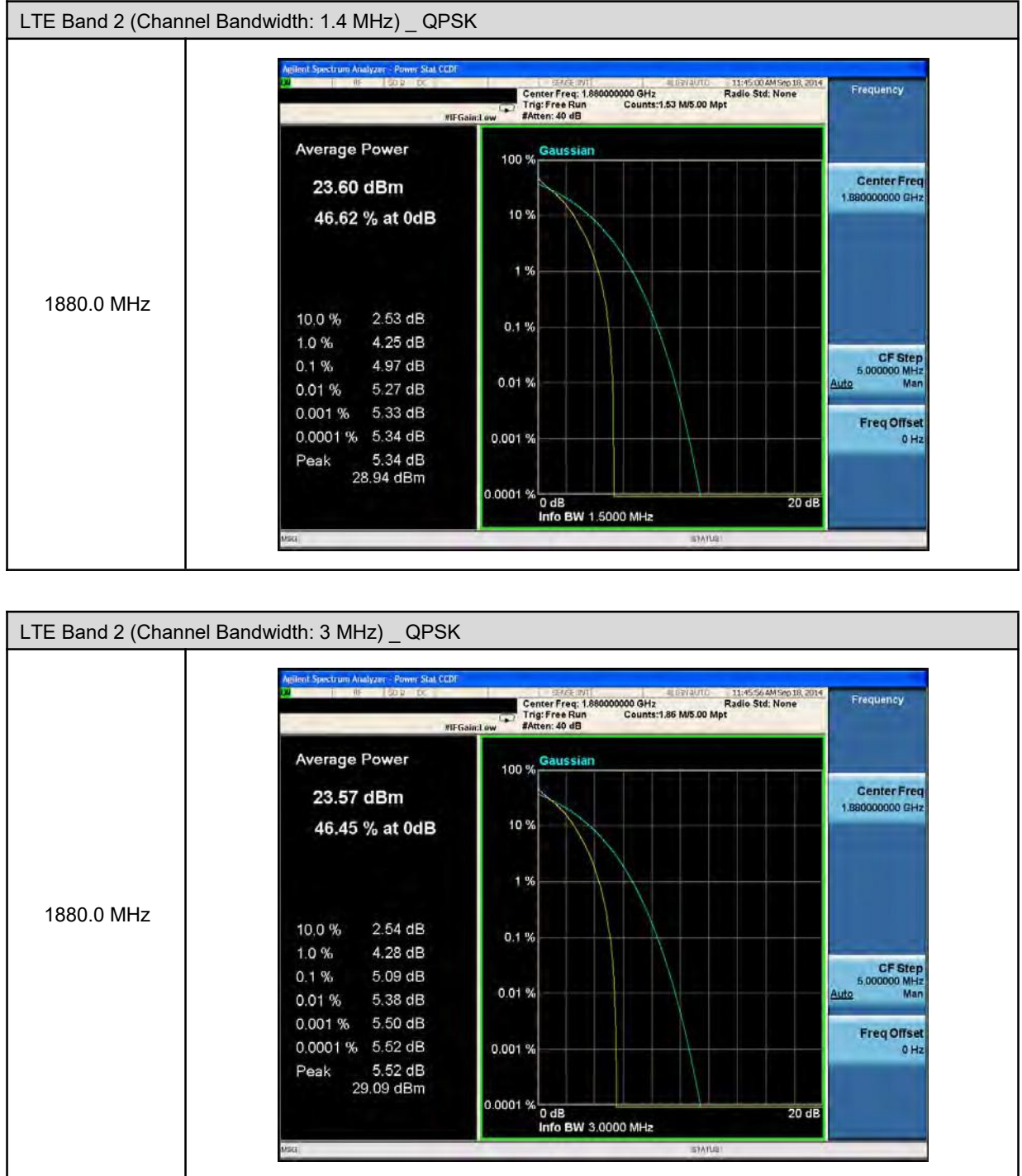


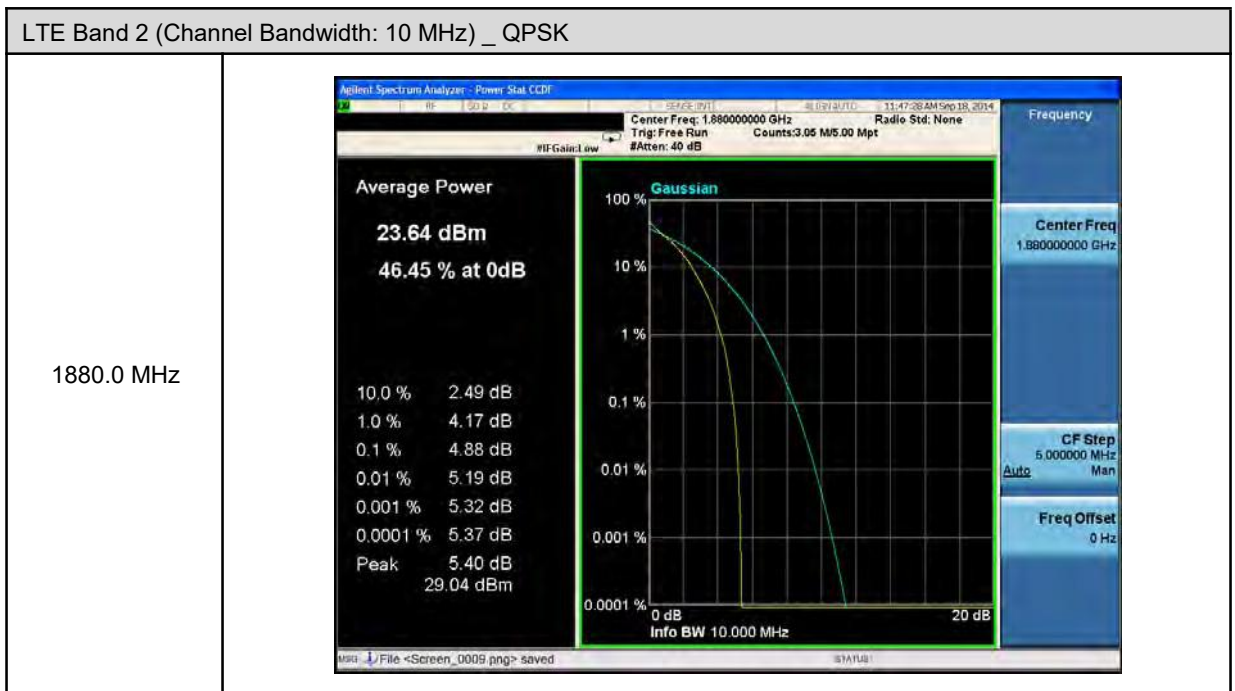
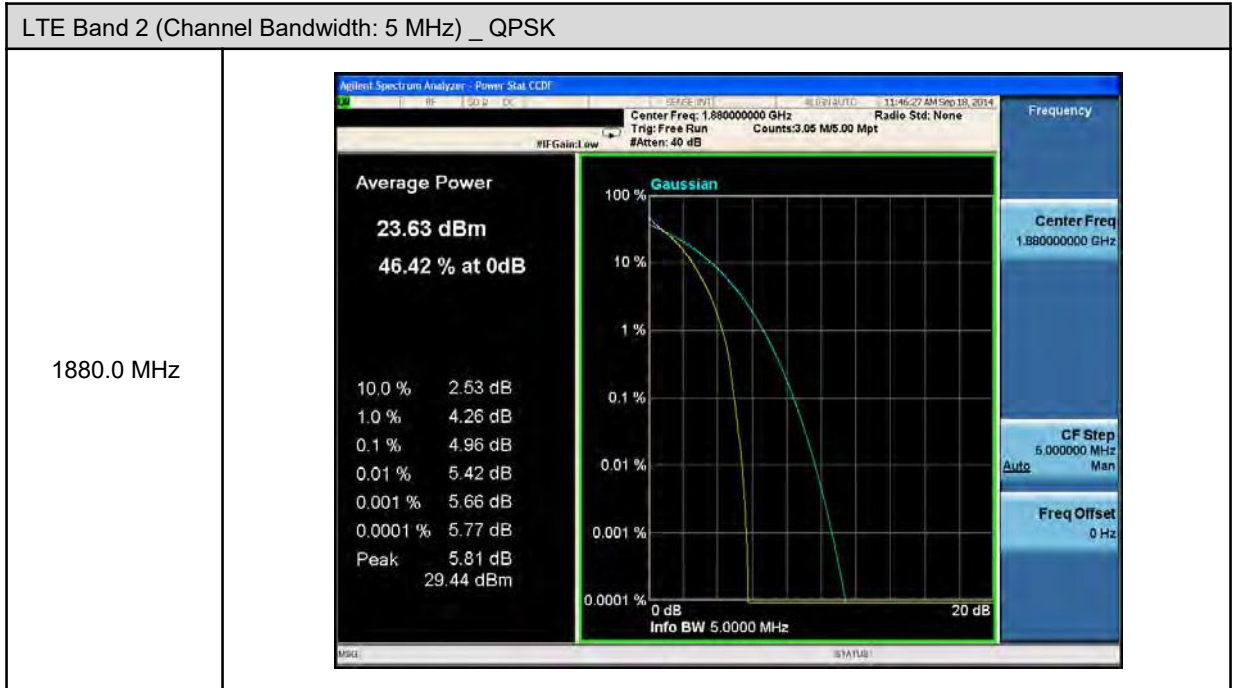
LTE Band 5				
Modulation	Channel Bandwidth	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)
QPSK	1.4 MHz	836.5	5.26	< 13
	3 MHz	836.5	5.41	< 13
	5 MHz	836.5	5.31	< 13
	10 MHz	836.5	5.47	< 13
16QAM	1.4 MHz	836.5	6.40	< 13
	3 MHz	836.5	6.61	< 13
	5 MHz	836.5	6.47	< 13
	10 MHz	836.5	6.64	< 13

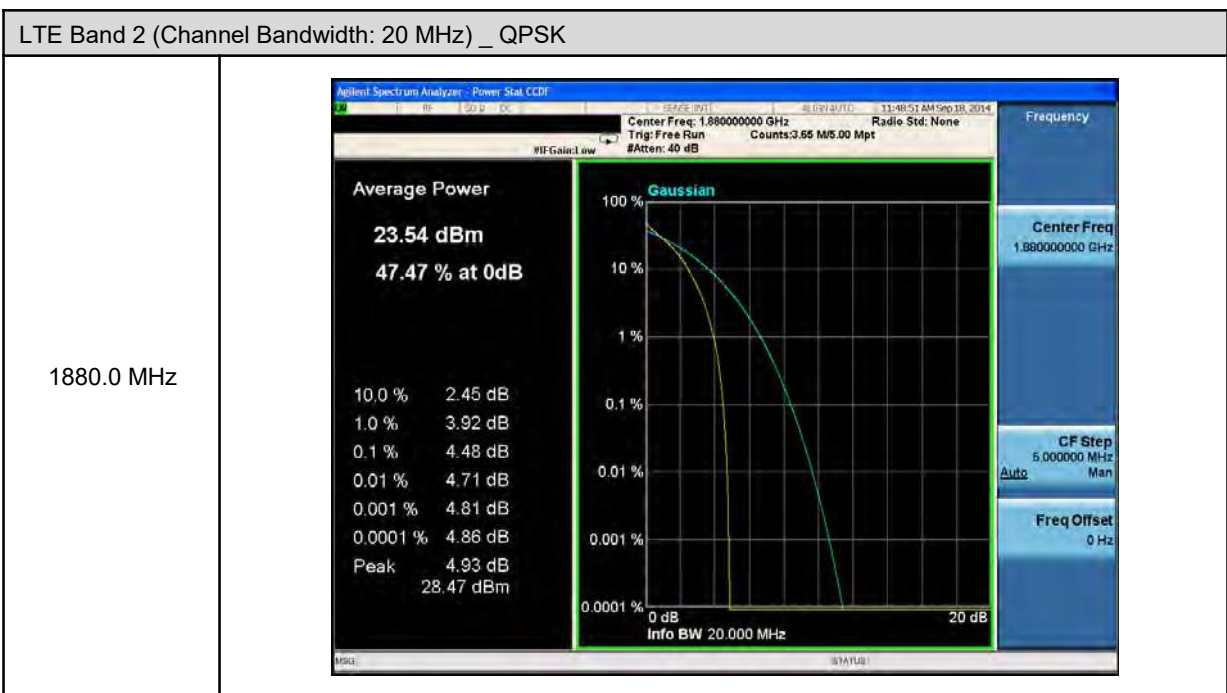
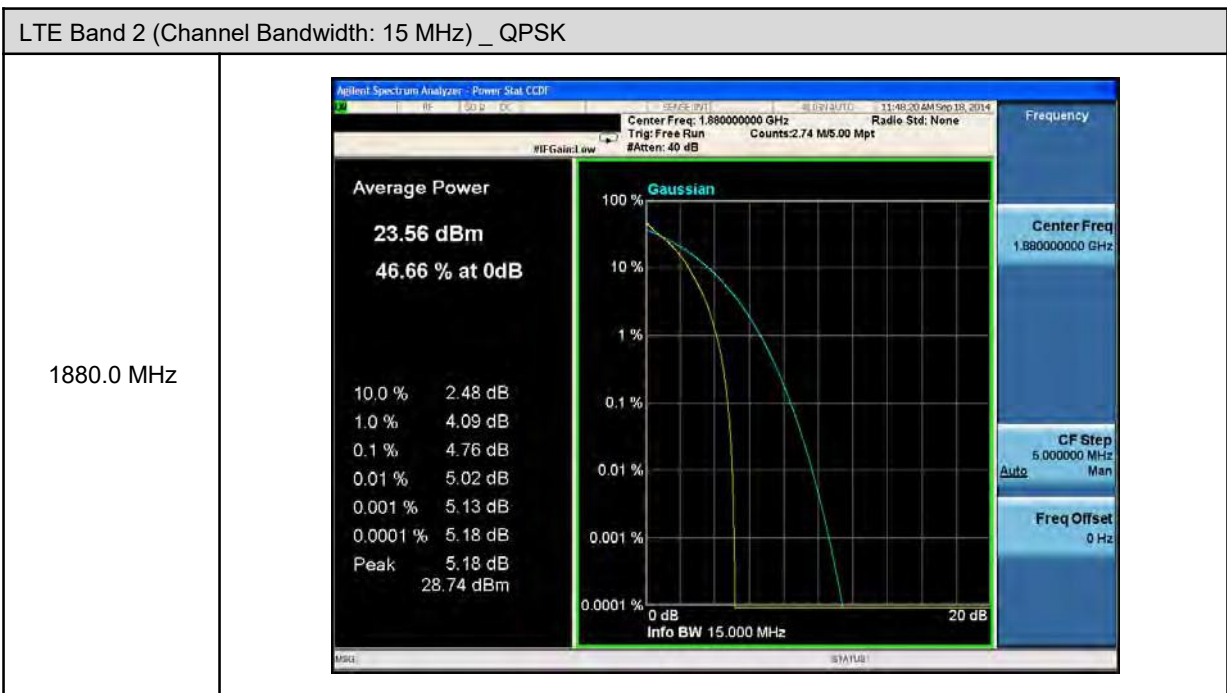
LTE Band 7				
Modulation	Channel Bandwidth	Frequency (MHz)	Peak to Average Ratio (dB)	Limit (dB)
QPSK	5 MHz	2535.0	4.03	< 13
	10 MHz	2535.0	4.18	< 13
	15 MHz	2535.0	4.37	< 13
	20 MHz	2535.0	4.53	< 13
16QAM	5 MHz	2535.0	5.18	< 13
	10 MHz	2535.0	5.32	< 13
	15 MHz	2535.0	5.56	< 13
	20 MHz	2535.0	5.72	< 13

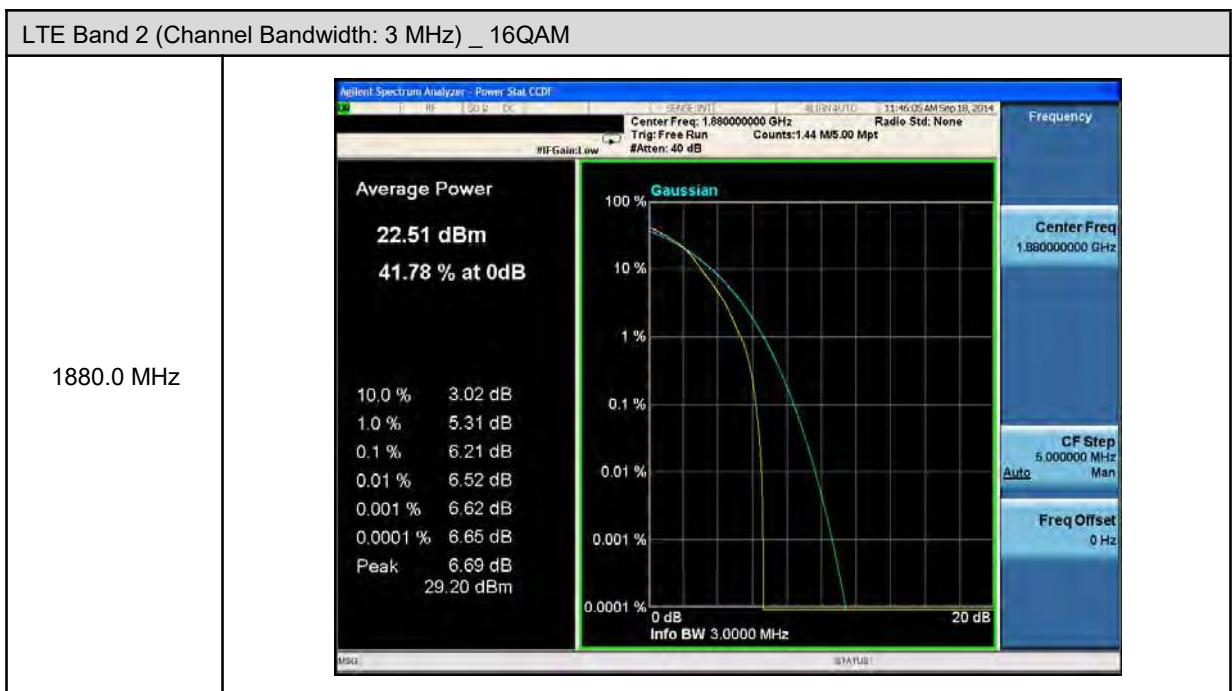
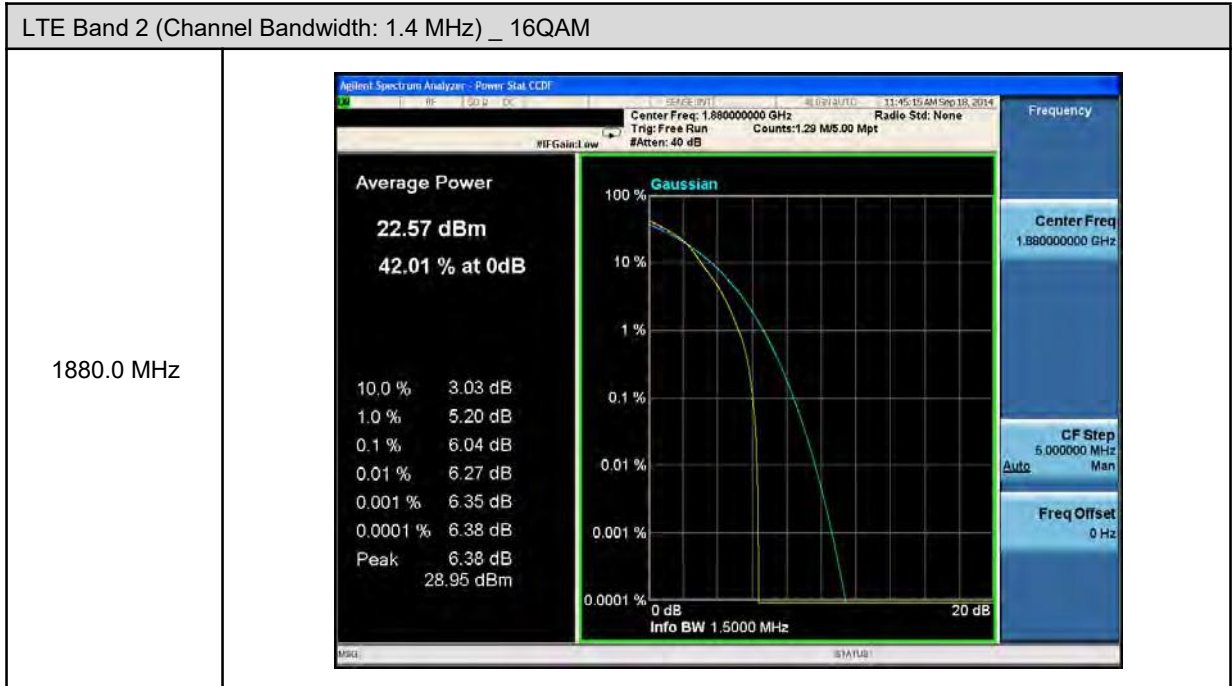


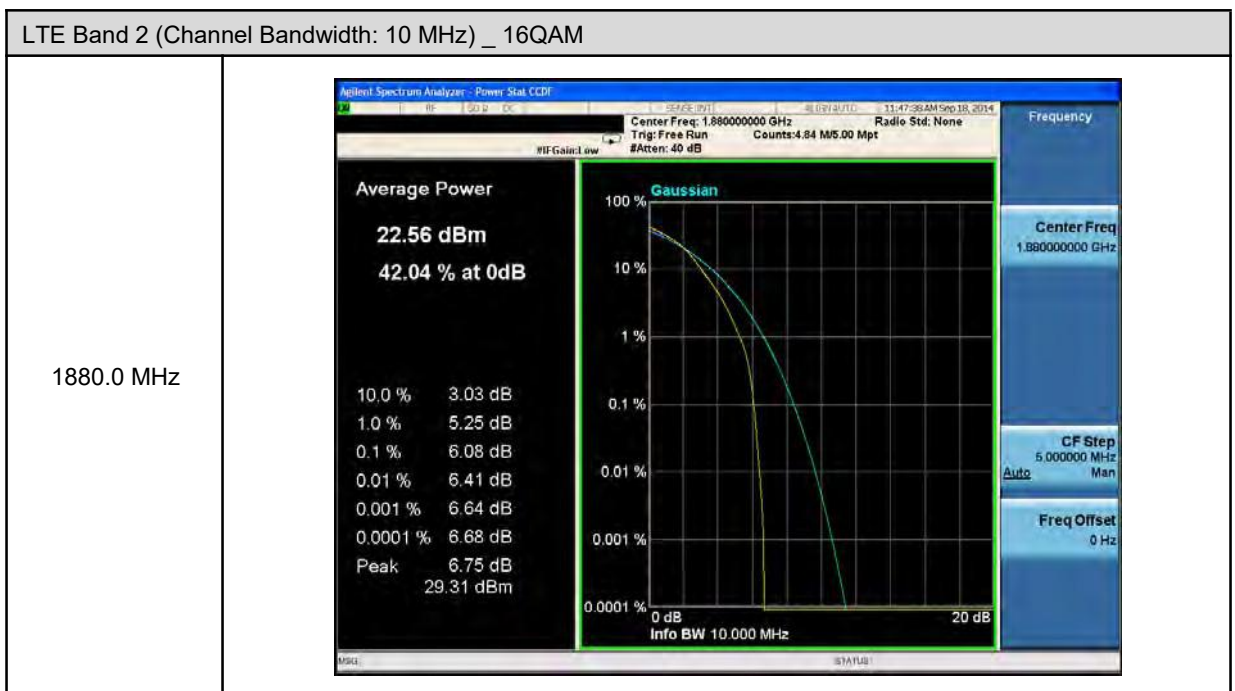
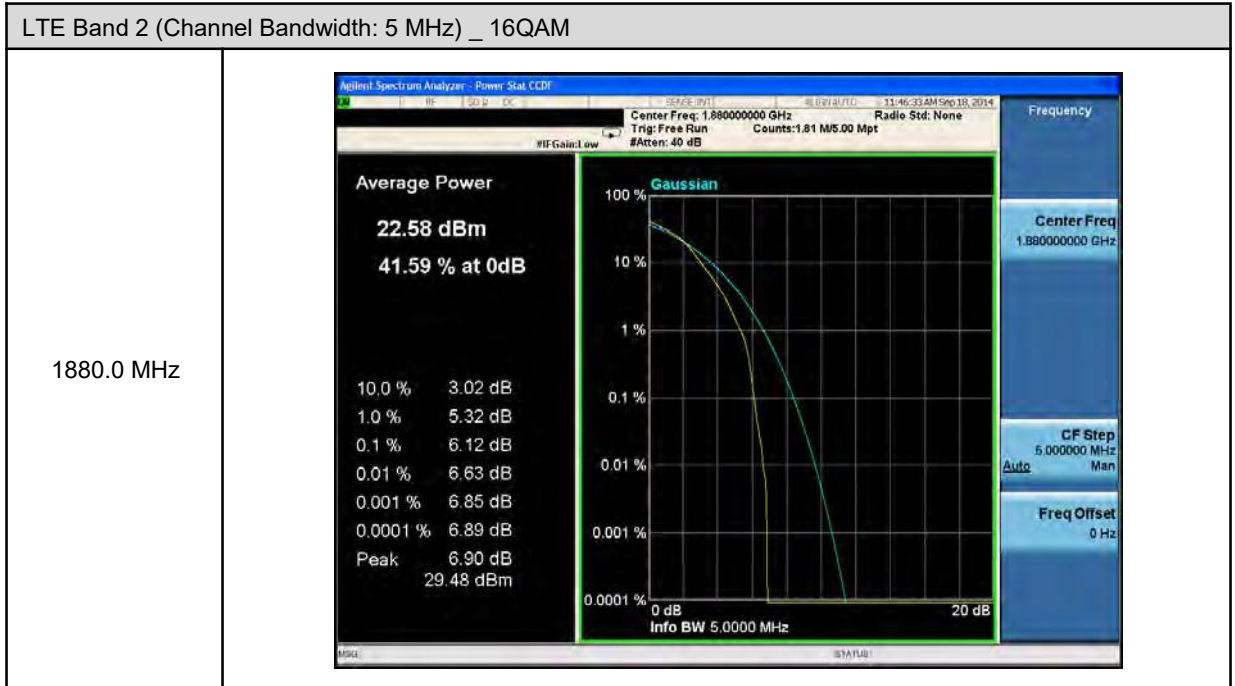
6.5. Test Graphs

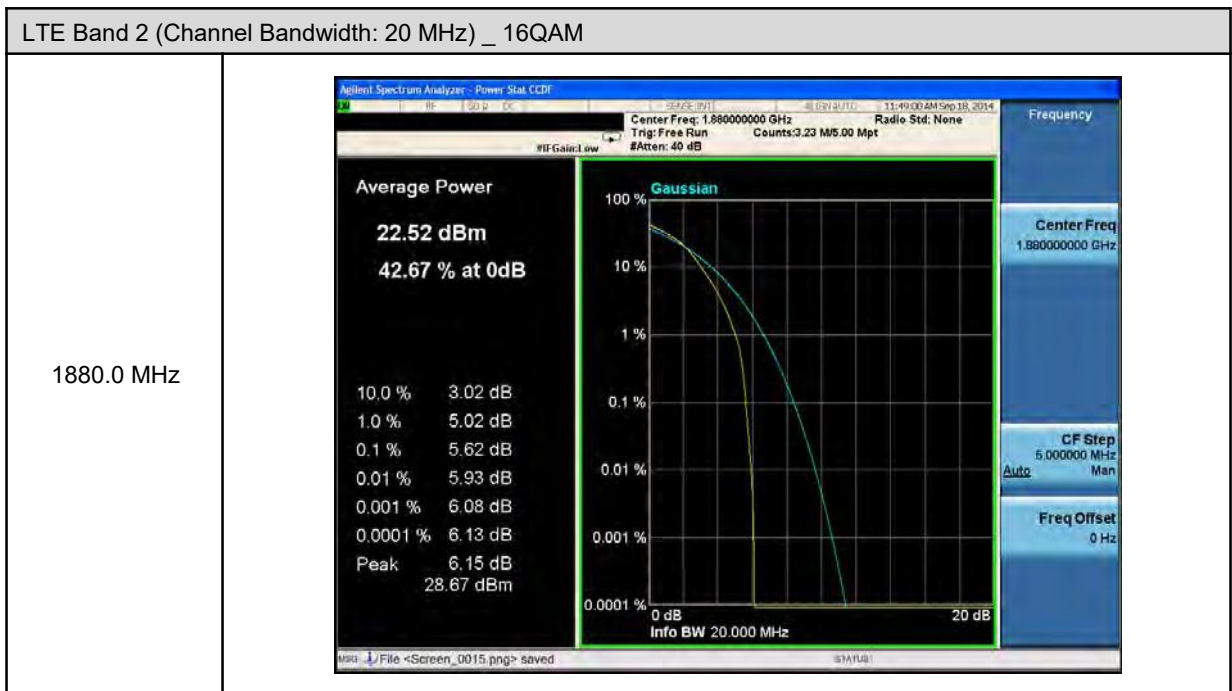
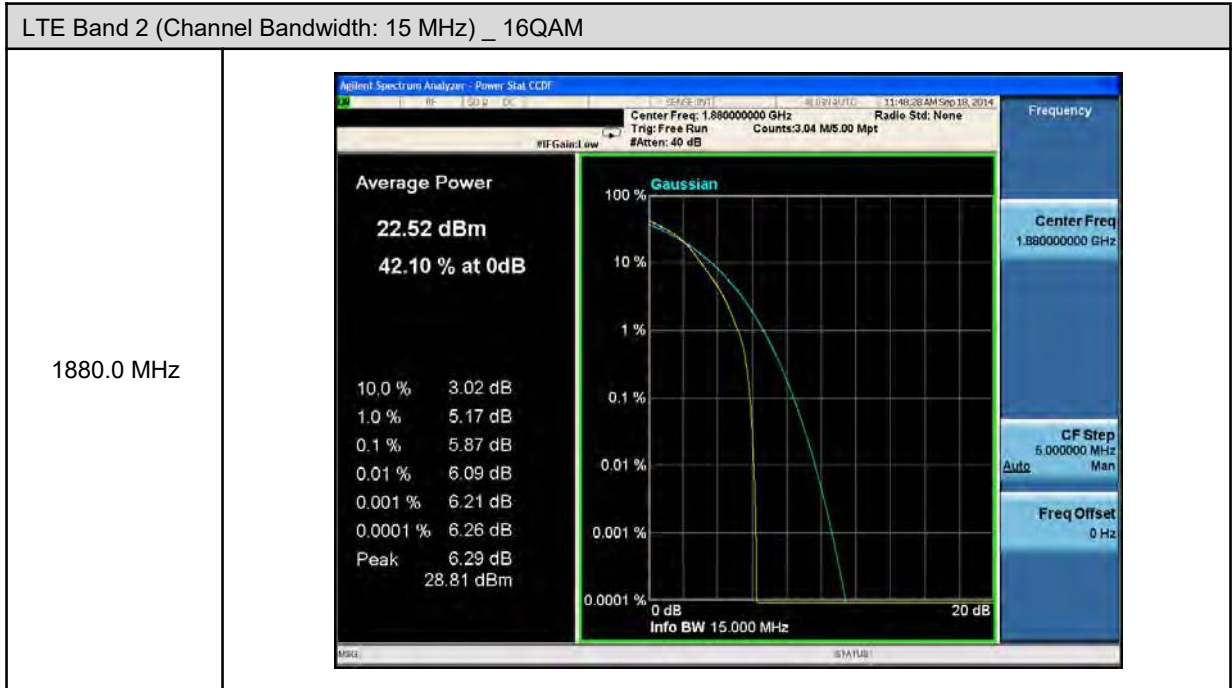


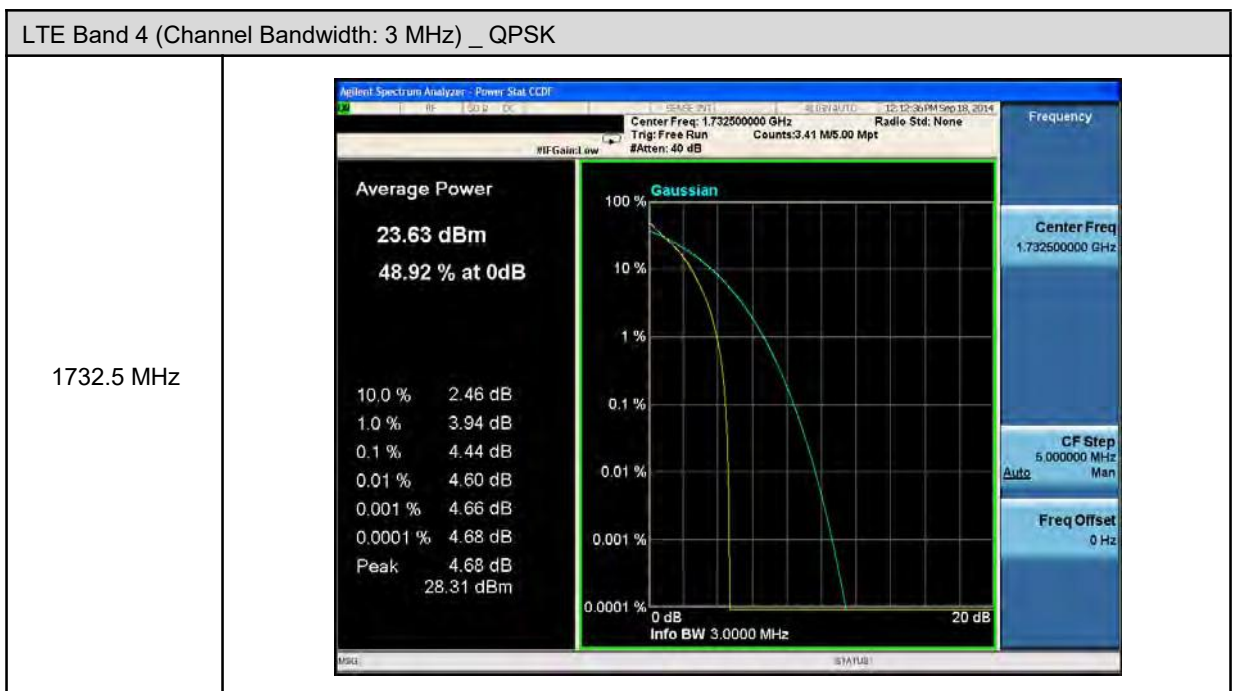
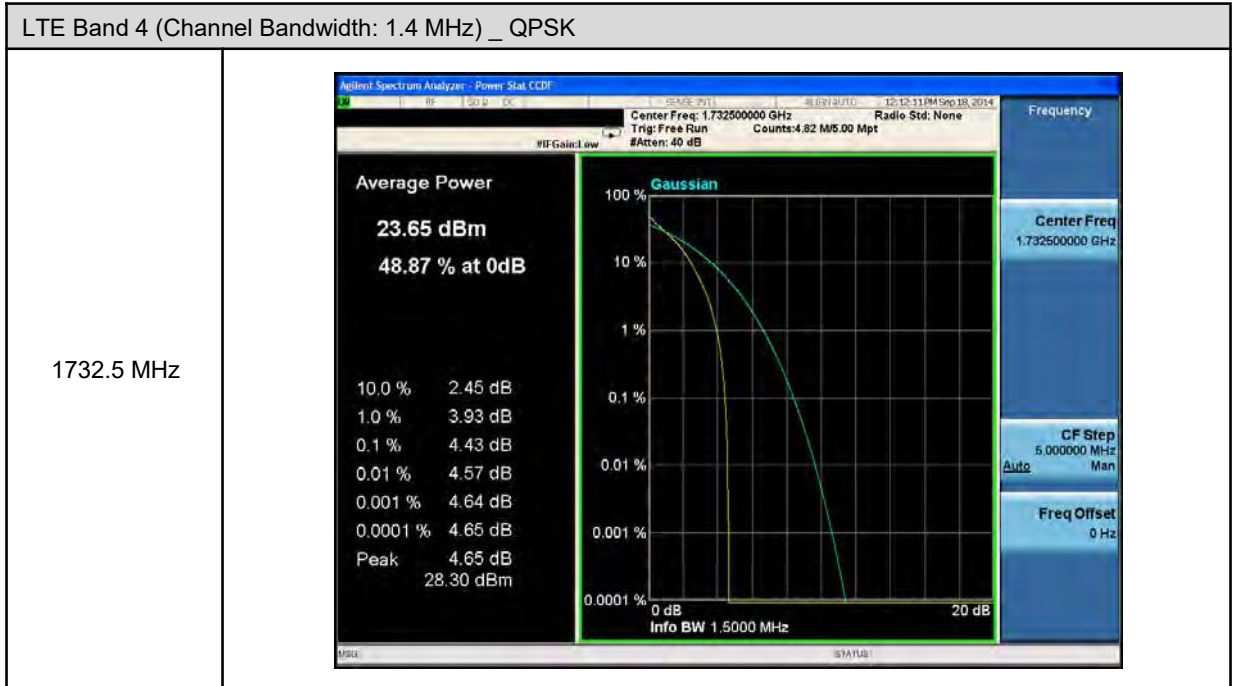


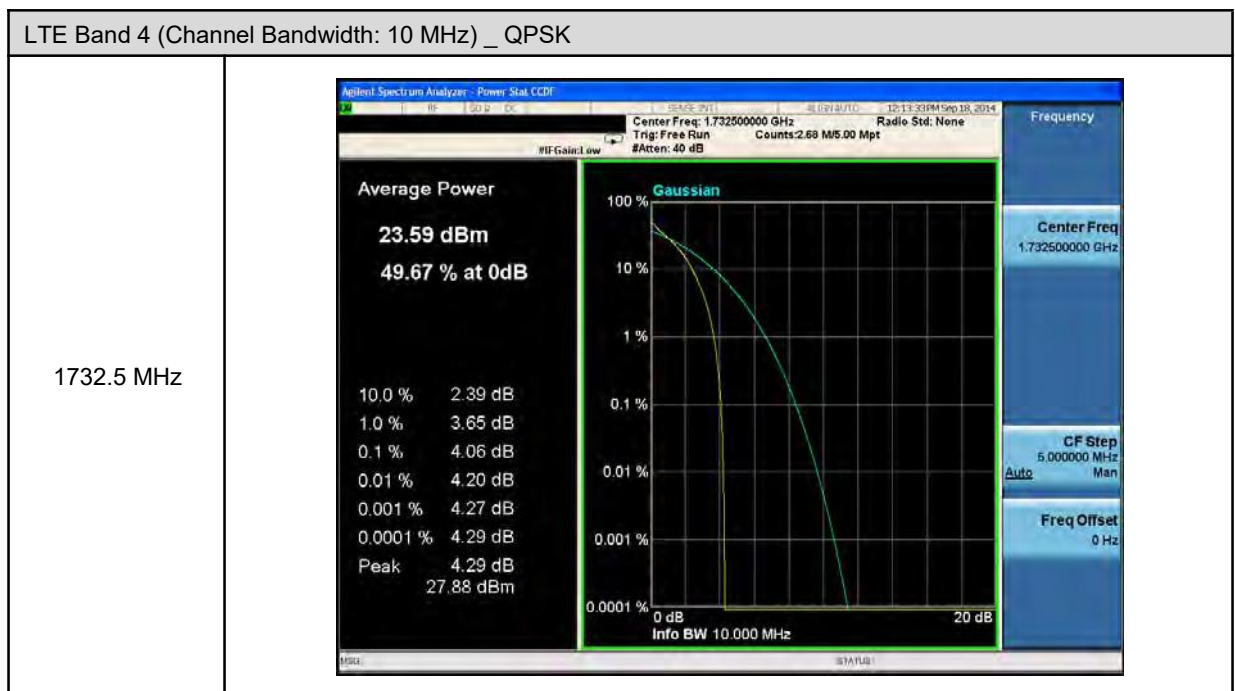
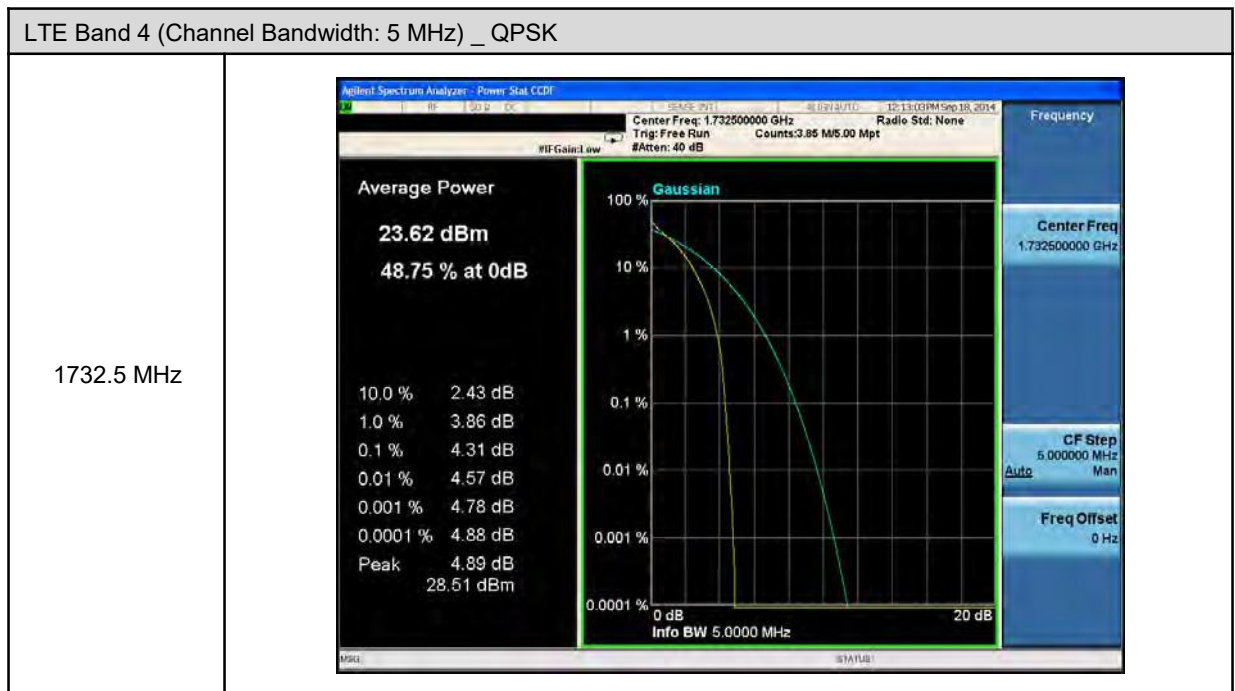


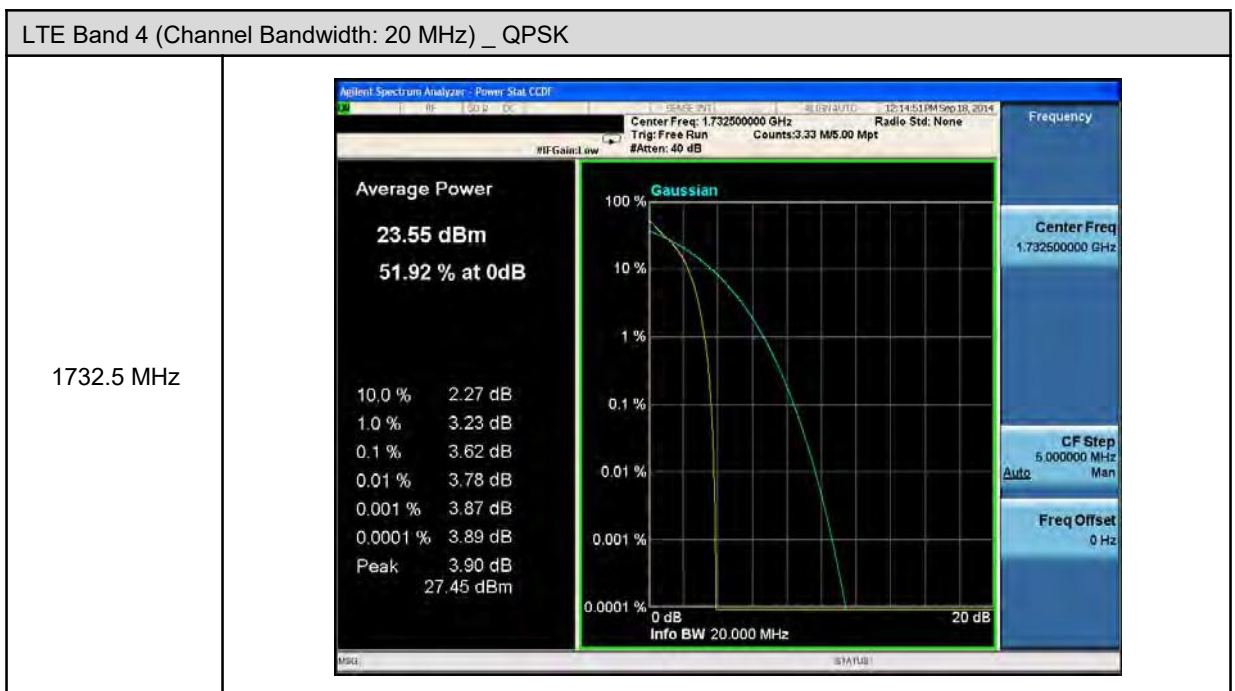
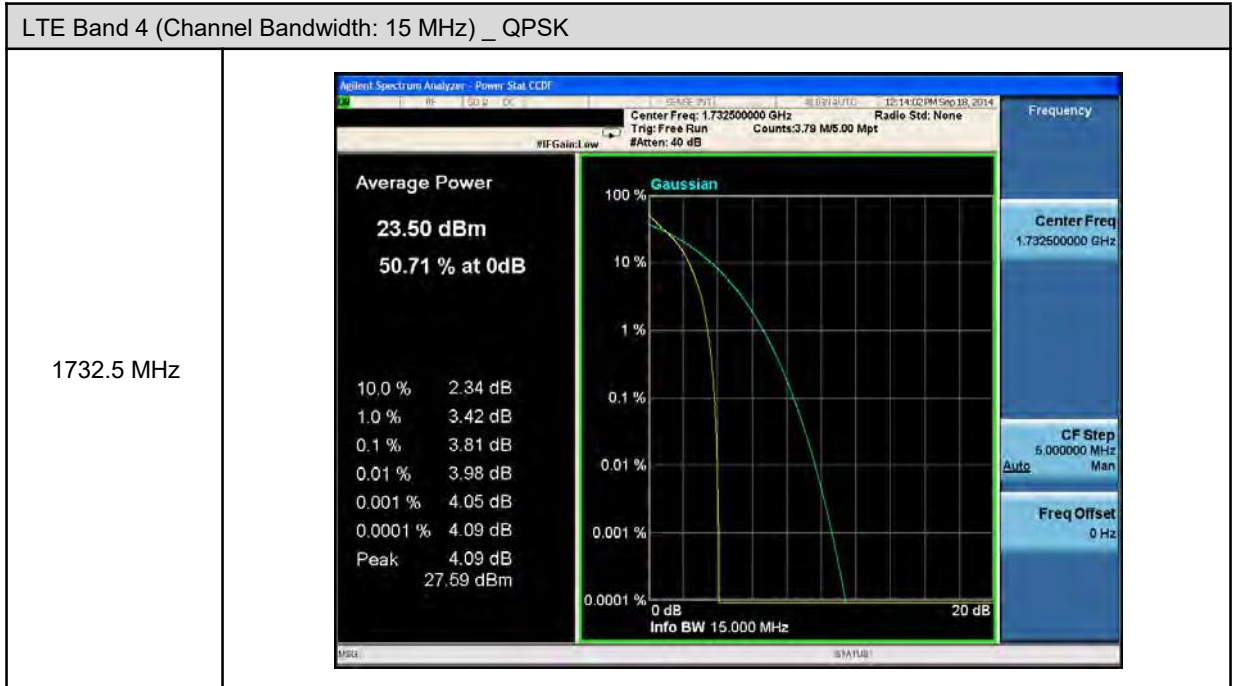


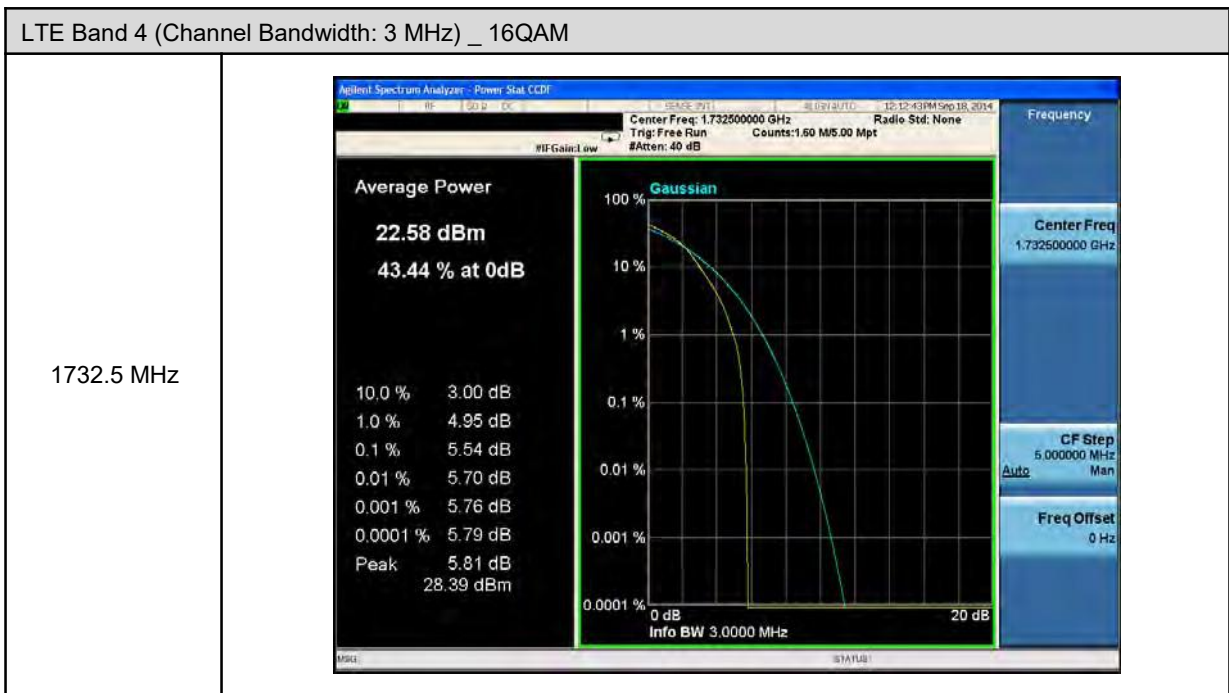
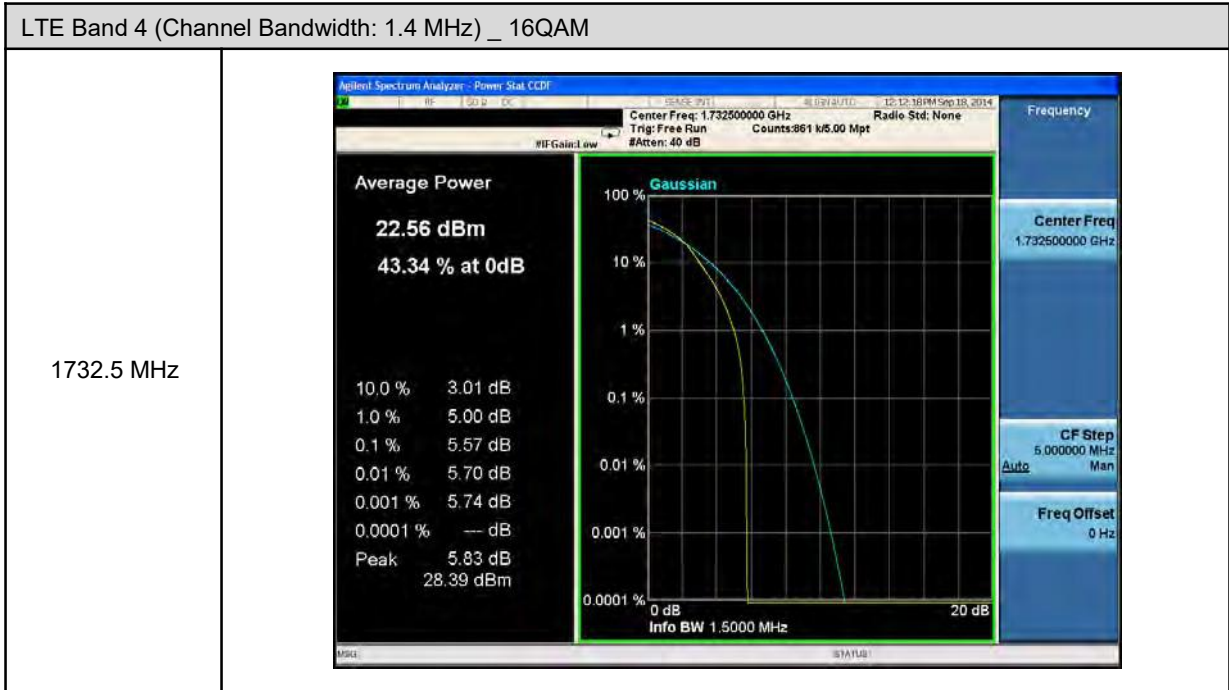


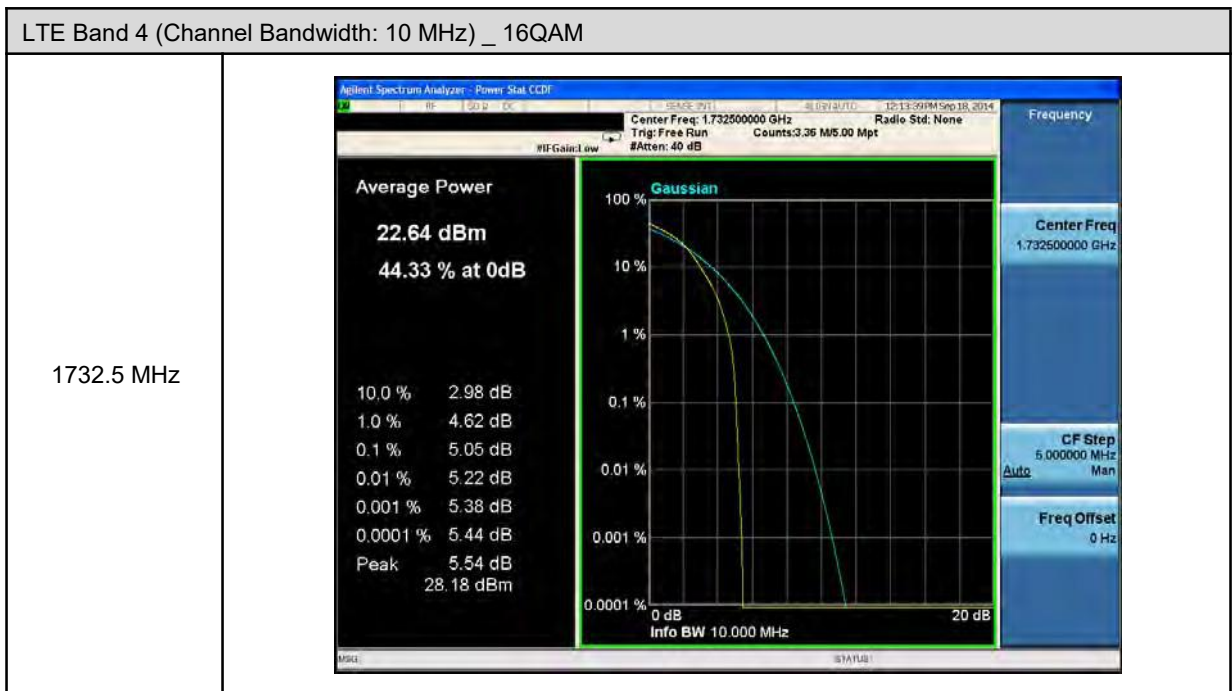
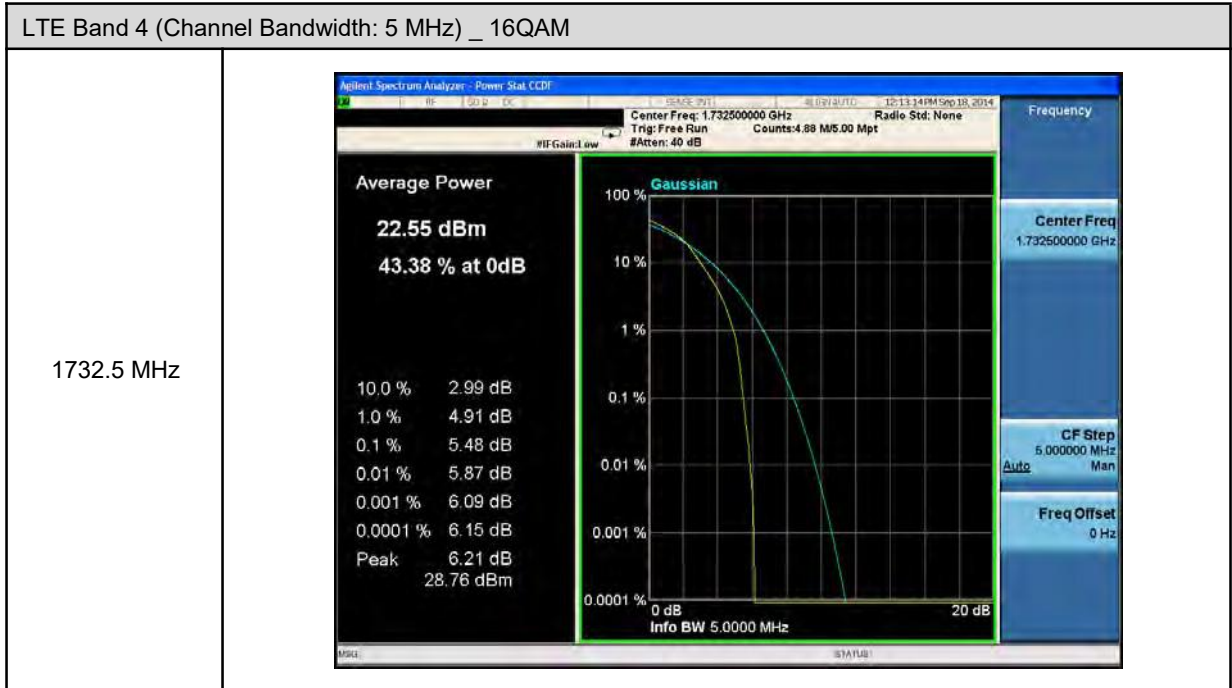


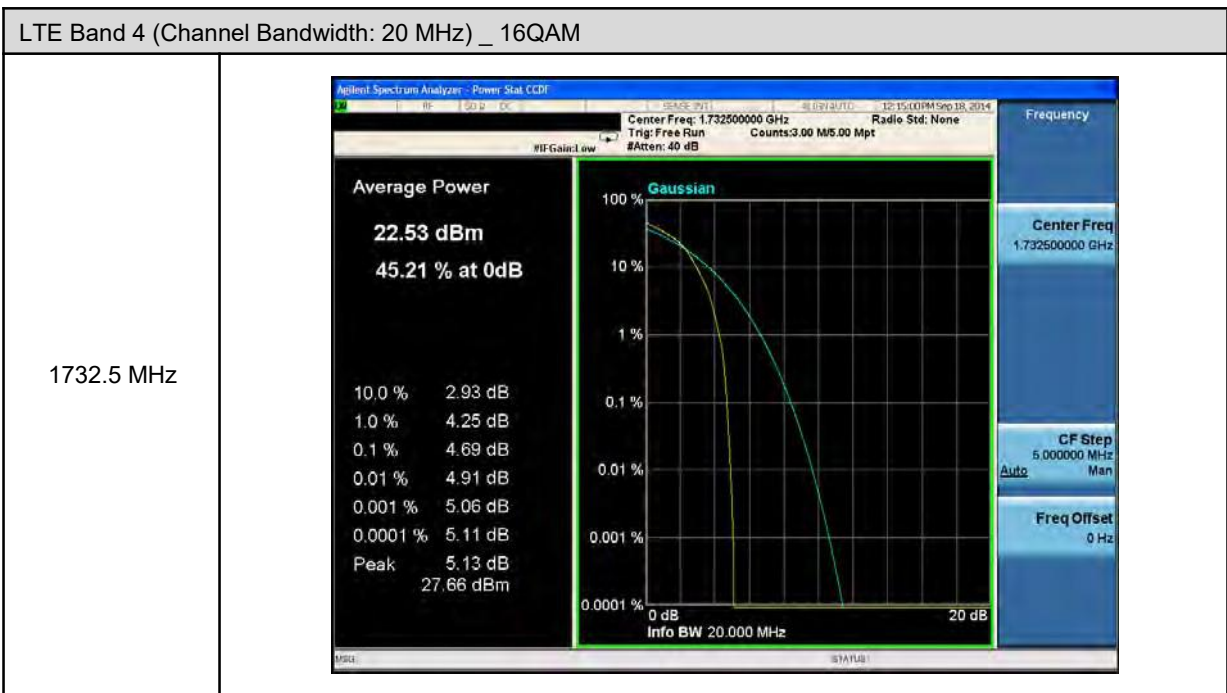
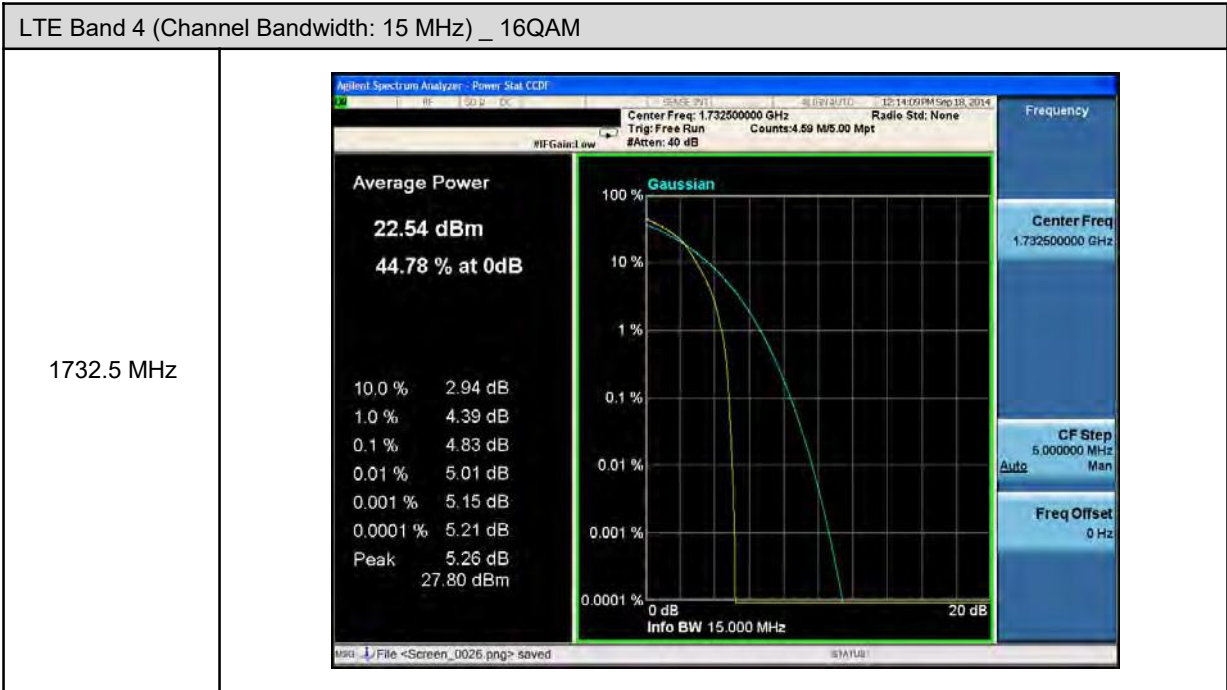














LTE Band 5 (Channel Bandwidth: 1.4 MHz) _ QPSK

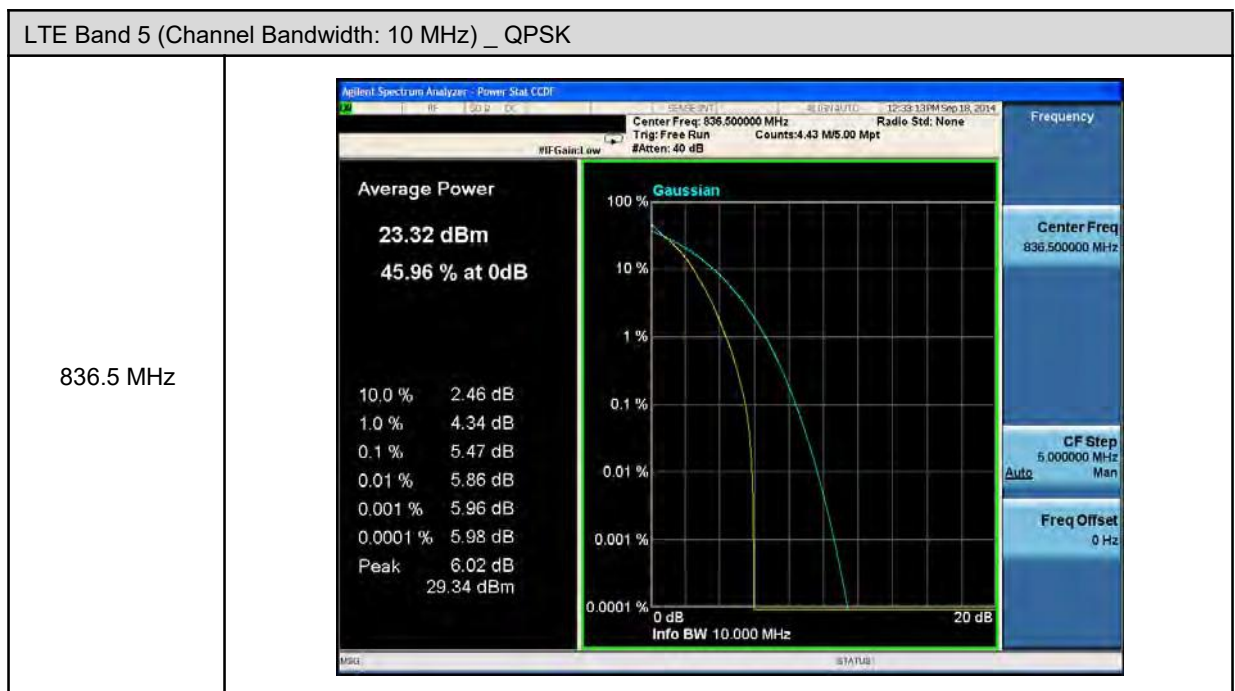
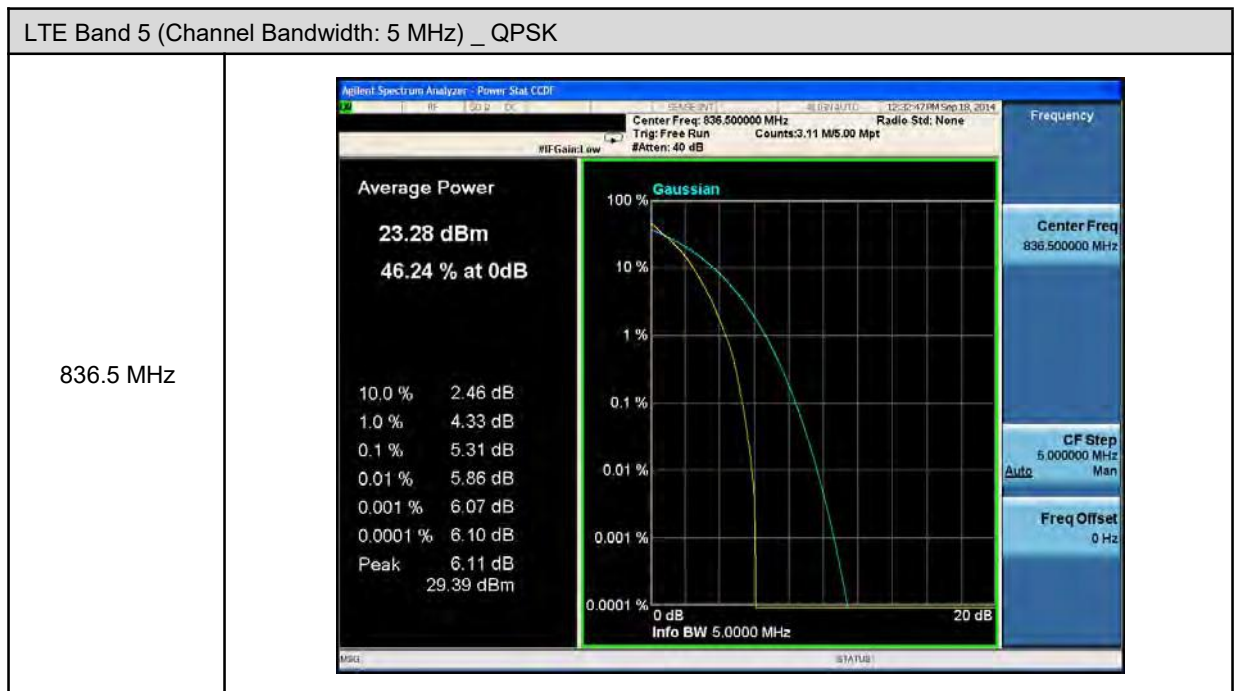
836.5 MHz

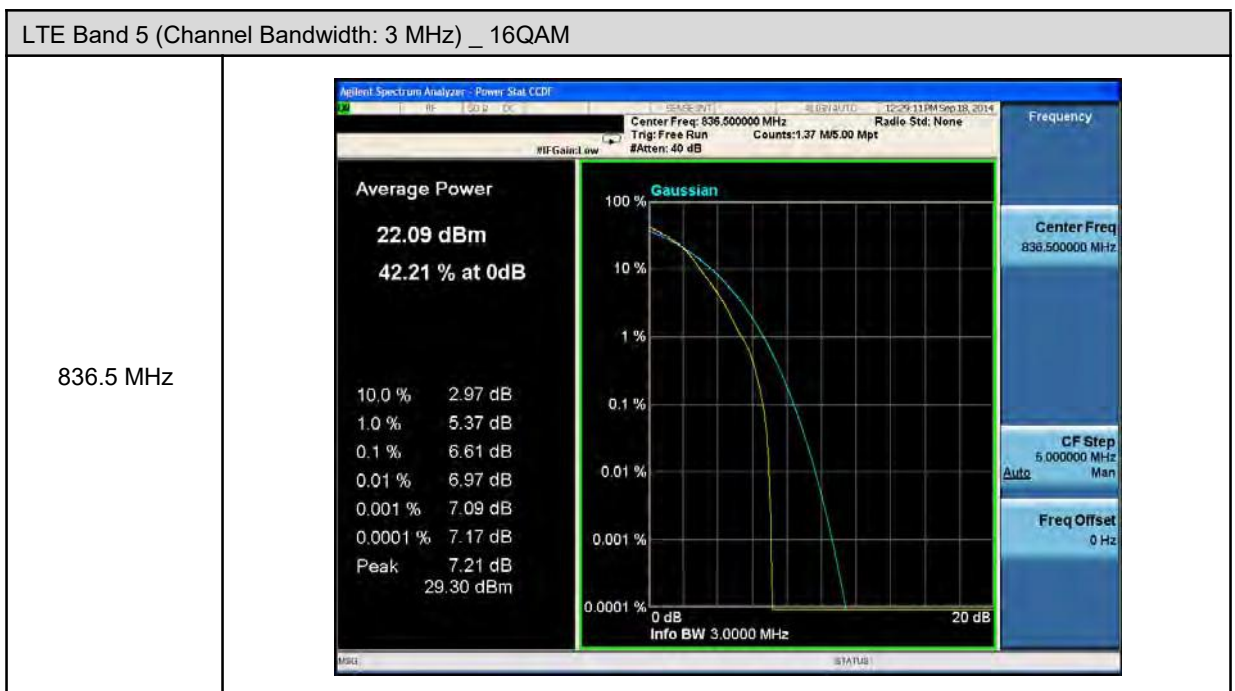
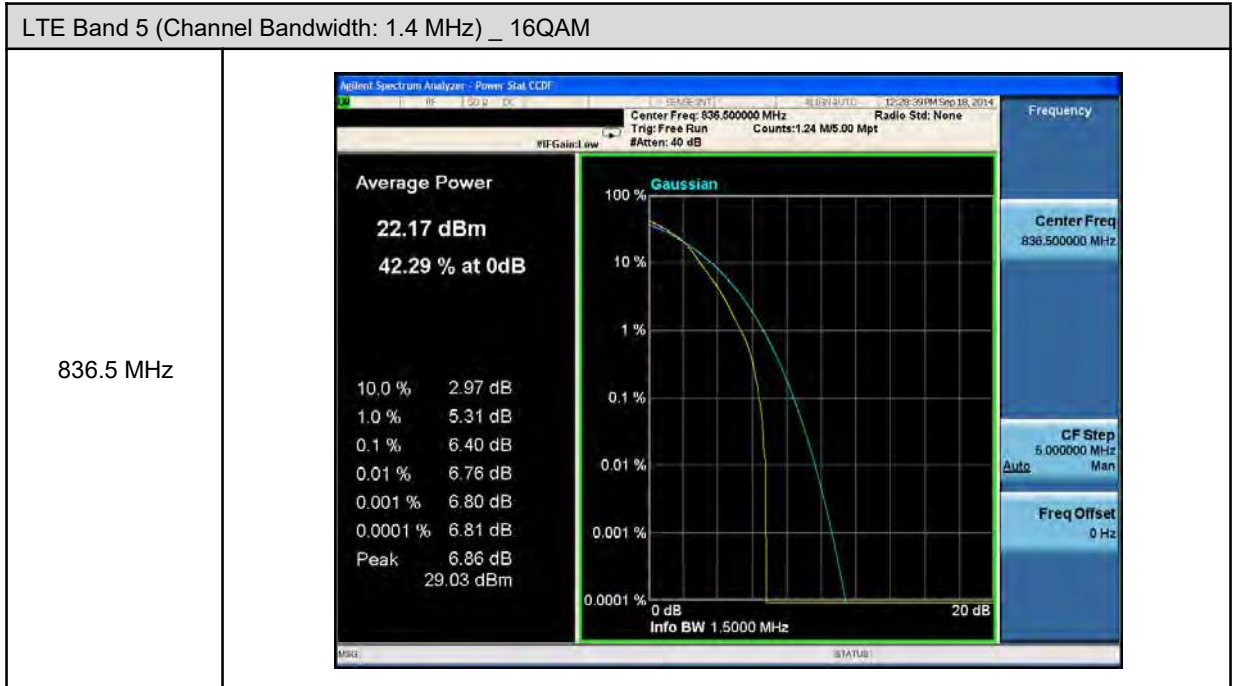


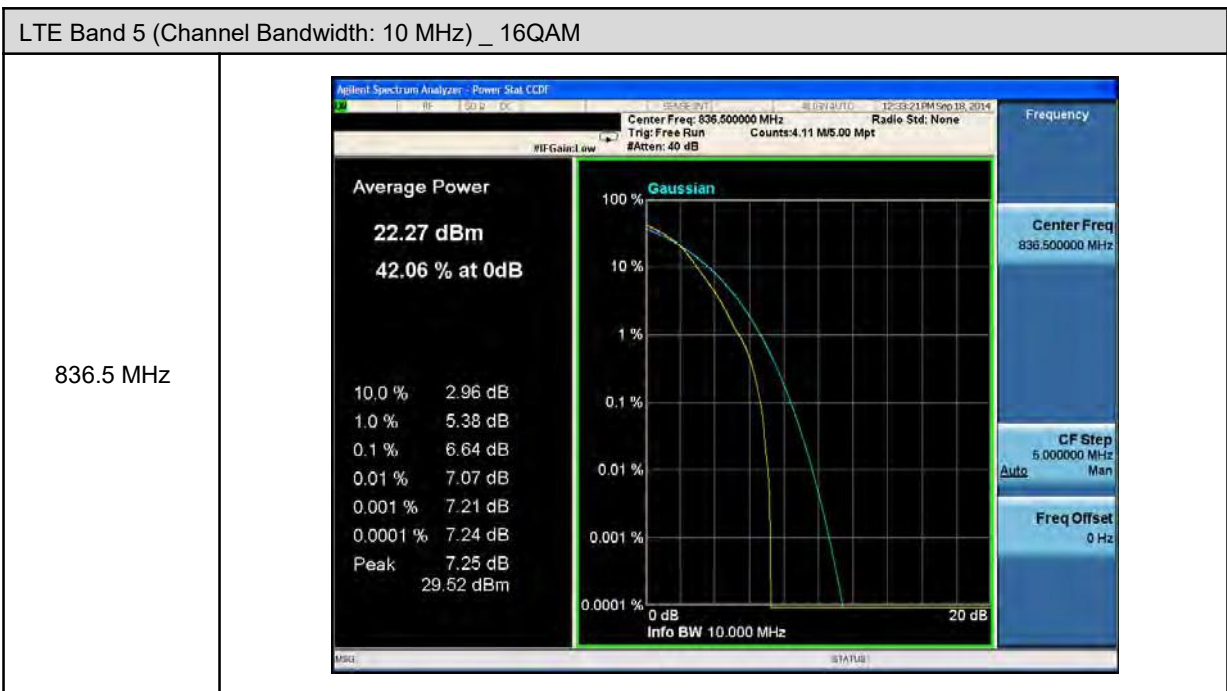
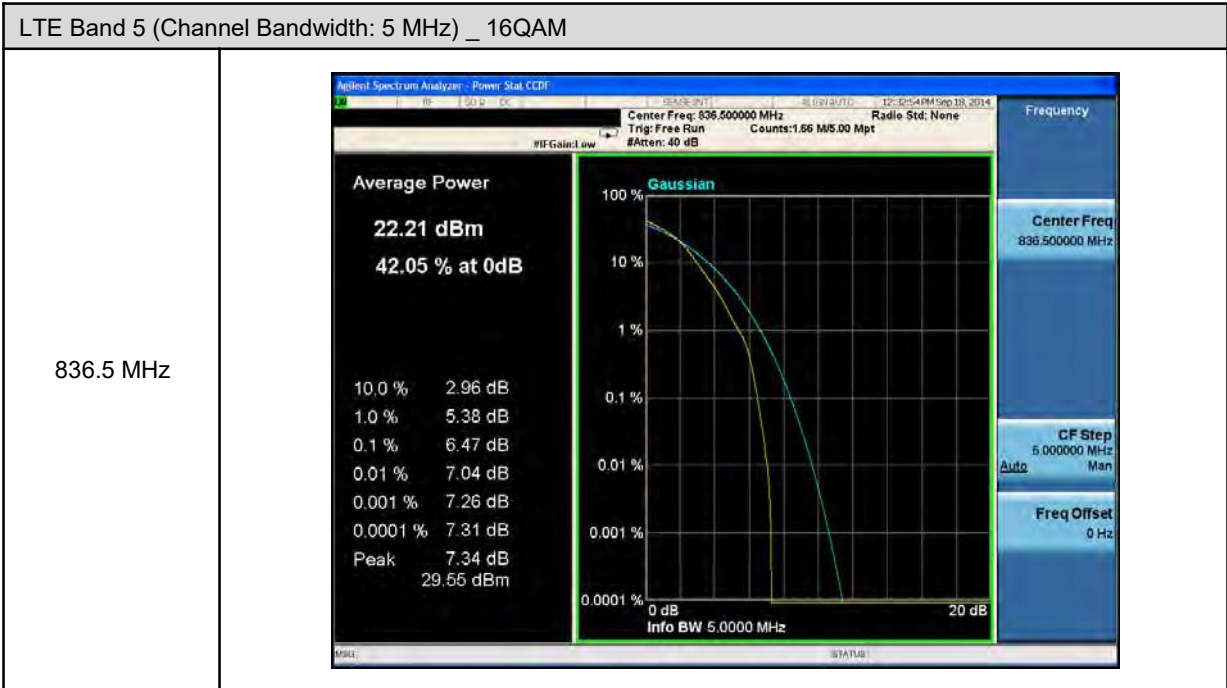
LTE Band 5 (Channel Bandwidth: 3 MHz) _ QPSK

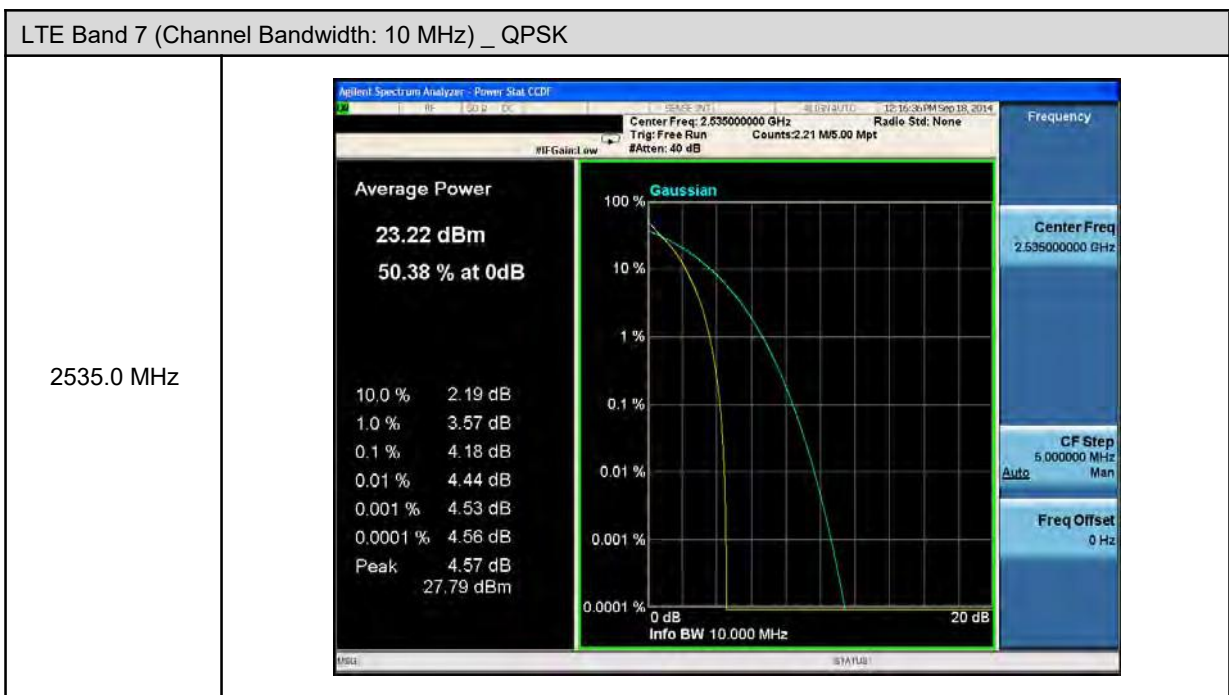
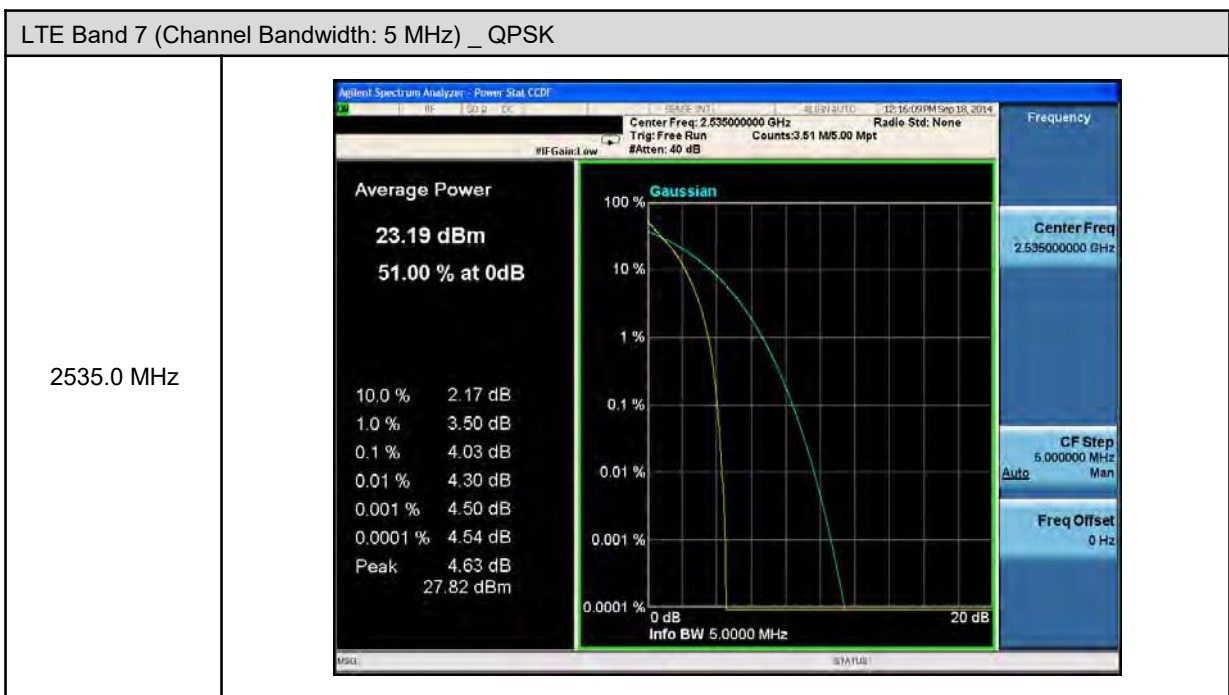
836.5 MHz

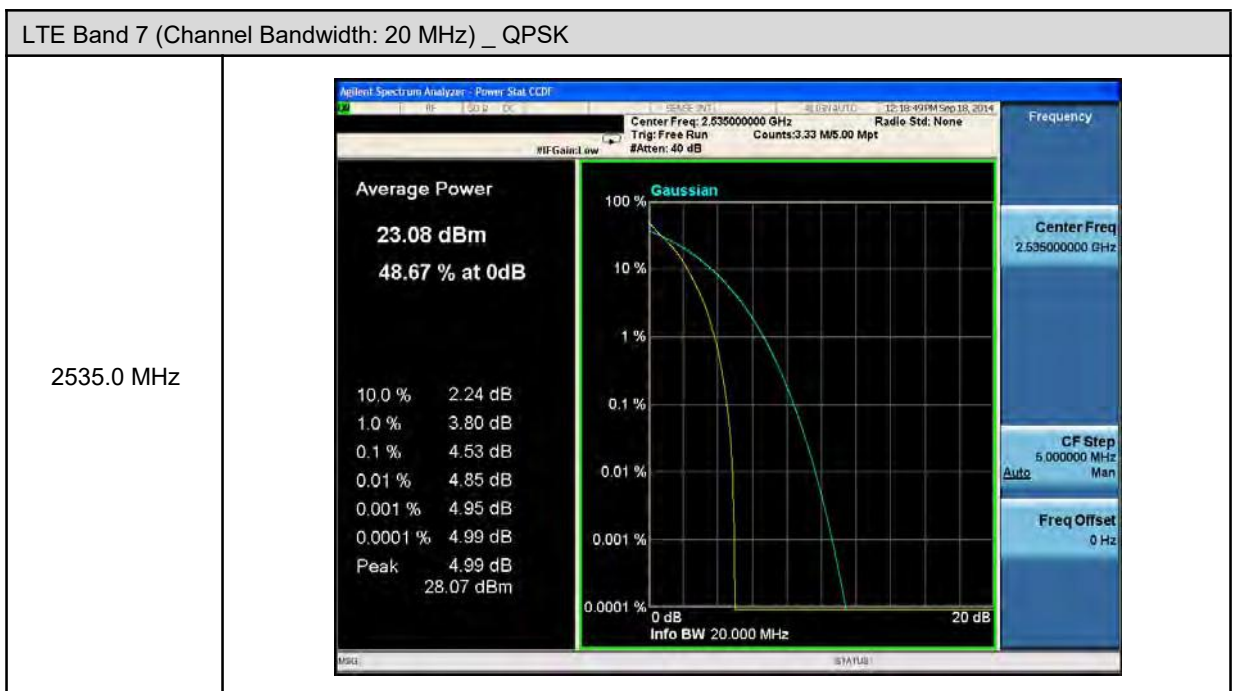
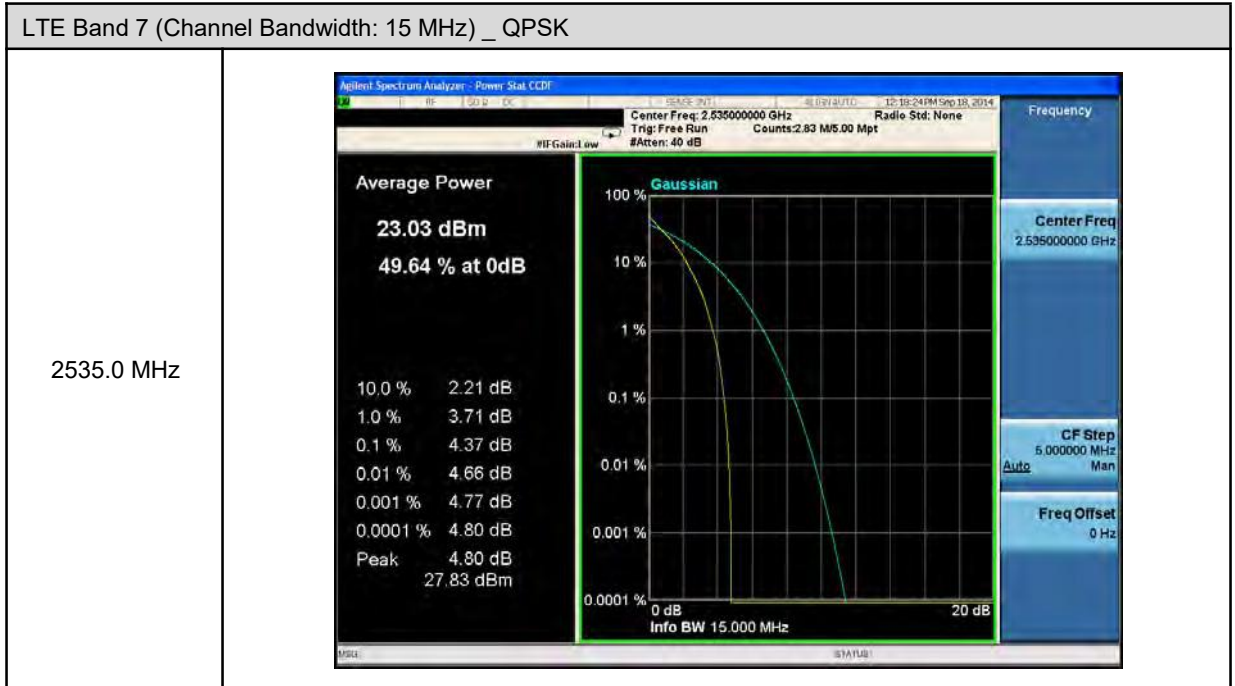


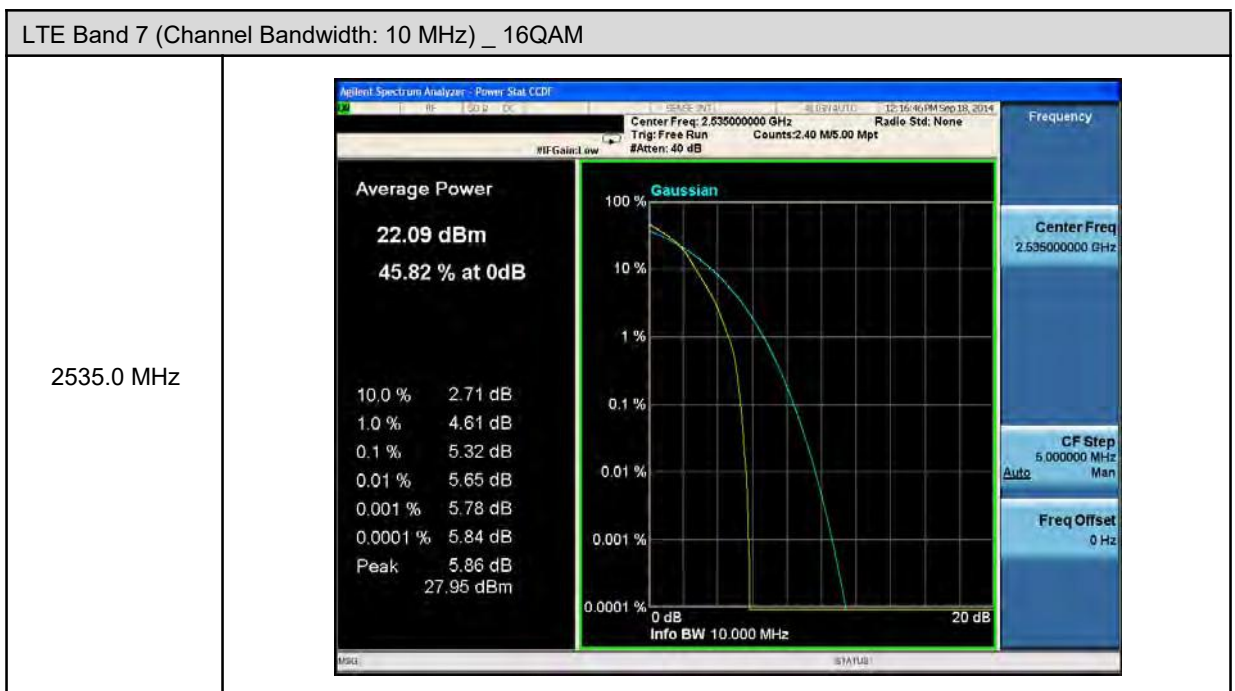
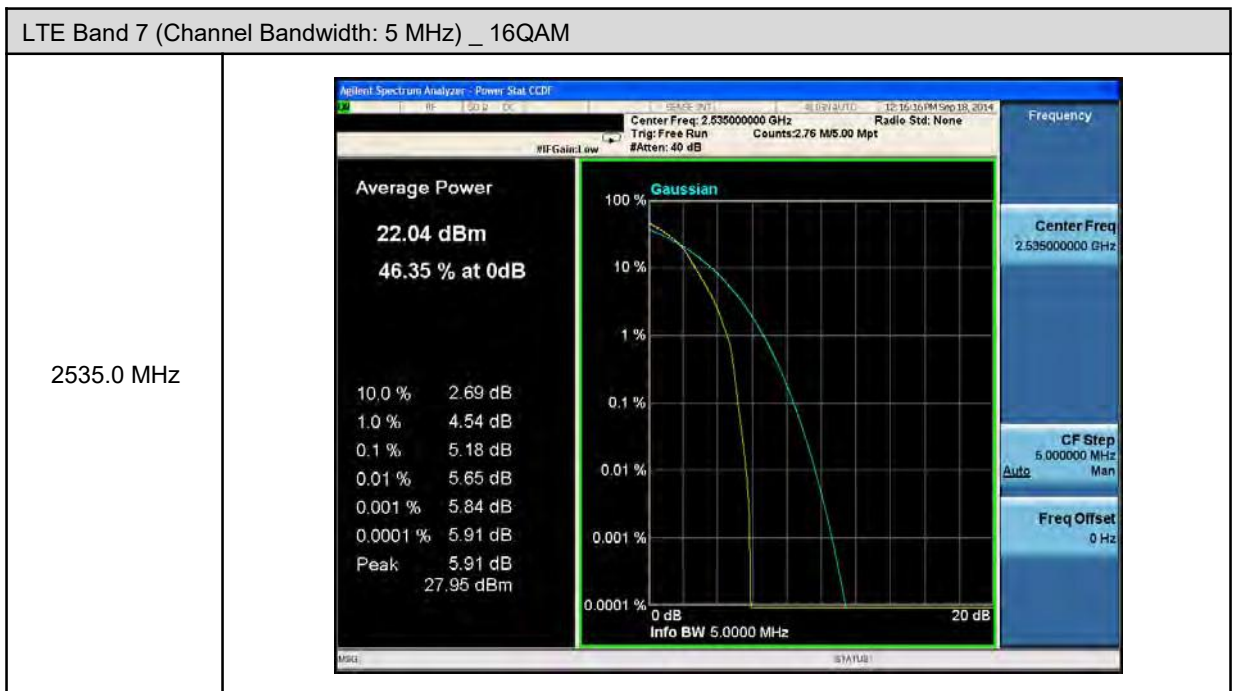


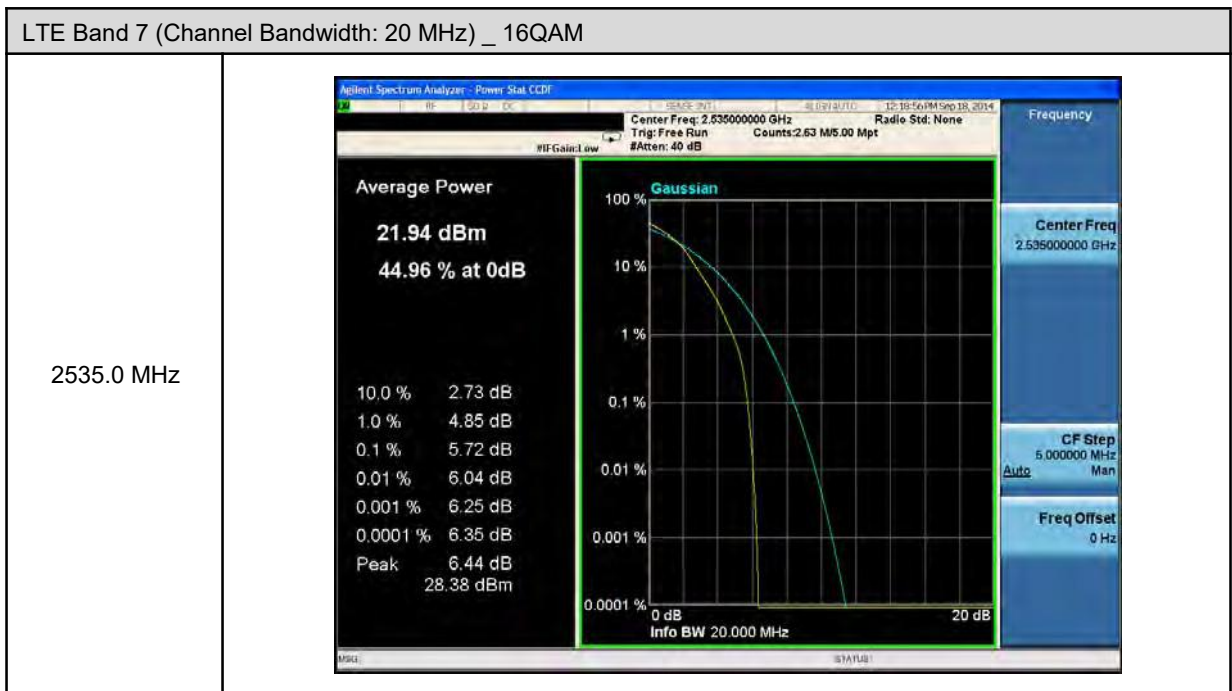
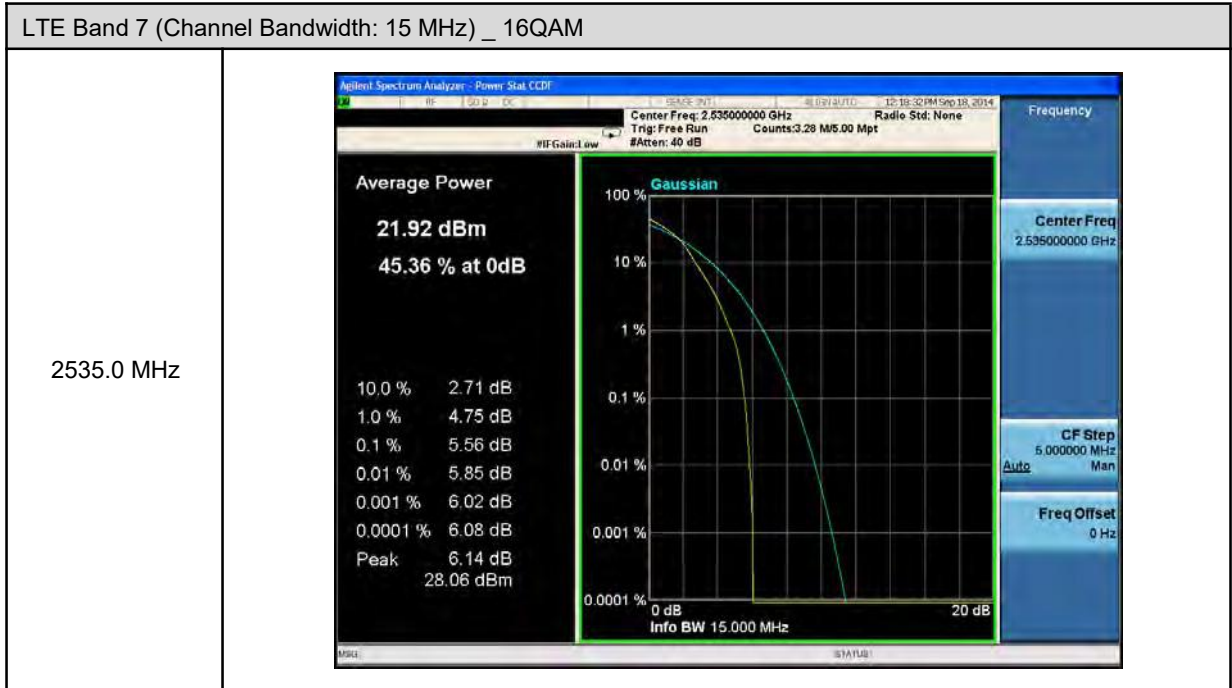














7 Band Edge Test

7.1. Limit

The Band Edge Limit:

§22.917(a), §24.238(a)

The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

§27.53(c)(2)

On any frequency outside the 777-787 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10\log(P)$ dB.

§27.53(c)(4)

On all frequencies between 763-775 MHz and 793-805 MHz, by a factor not less than $65 + 10\log(P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

§27.53(g)

The power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10\log_{10}(P)$ dB.

§27.53(m)

For mobile digital stations, the attenuation factor shall be not less than $43 + 10\log(p)$ dB at the channel edge and $55 + 10\log(P)$ dB at 5.5 megahertz from the channel edges.

Part 27.53(m)(4) / specifies that " For BRS and EBS stations.

For mobile digital stations, the attenuation factor shall be not less than $40 + 10\log(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10\log(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10\log(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(4) of this section. In addition, the attenuation factor shall not be less than $43 + 10\log(P)$ dB on all frequencies between 2490.5 MHz and 2496 MHz and $55 + 10\log(P)$ dB at or below 2490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.